

US EPA ARCHIVE DOCUMENT

Pennsylvania
Base Program Description
Appendices XIV - XX



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
 Bureau of Waste Management
 P. O. Box 2063
 Harrisburg, PA 17120



* P A B X 2 8 8 4 8 0 3 *

ER-SWM-51:REV. 10/84

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
 Form Approved. OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of Information in the shaded areas is not required by Federal law but is required by State law.	
3. Generator's Name and Mailing Address				A. State Manifest Document Number PAB 2884803	
4. Generator's Phone ()				B. State Gen. ID	
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Trans. ID PA-AH	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone ()	
9. Designated Facility Name and Site Address		10. US EPA ID Number		E. State Trans. ID PA-AH	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				F. Transporter's Phone ()	
				G. State Facility's ID Not Required	
				H. Facility's Phone ()	
				I. Waste No.	
a.		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
b.					
c.					
d.					
J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)				K. Handling Codes for Wastes Listed Above	
a. Haz. Code Physical State		c. Haz. Code Physical State		a.	
b. Haz. Code Physical State		d. Haz. Code Physical State		b.	
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations, and all applicable State laws/regulations.					
Printed/Typed Name				Signature	
				Date Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Date Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Date Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name				Signature	
				Date Month Day Year	

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

GENERATOR

TRANSPORTER

FACILITY

US EPA ARCHIVE DOCUMENT

PAB 2884803

**INSTRUCTIONS FOR COMPLETION OF THE
PA HAZARDOUS WASTE MANIFEST**

— Please read these instructions before completing this form —

GENERAL INFORMATION

This Hazardous Waste Manifest consists of eight copies. As the Manifest is completed the copies are removed from back to front. For interstate shipments, the copies of the manifest shall be distributed as indicated at the bottom of each copy. For shipments within Pennsylvania, the Generator shall retain Copies 6, 7, and 8. The TSD Facility shall retain Copies 1, 2, and 4. If there are more than four different waste streams in a shipment, except for lab packs, complete another Manifest. If there are more than two transporters or if the waste is a lab pack, use the Uniform Hazardous Waste Manifest Continuation Sheet. Continuation Sheets may be purchased commercially. If you have any questions concerning the completion of this Manifest, call 717-787-6239.

NOTE: For interstate shipments you may be required to supply additional information regarding the completion of lettered Items A through K. Please check with both the Generator and Destination States for specific requirements.

GENERATOR

- Item 1. Generator's US EPA ID No. - Enter the twelve digit US EPA Identification Number. Manifest Document No. - The generator must assign a unique five digit number.
- Item 2. Page 1 of - Enter the total number of pages used to complete this Manifest including the first page plus the number of Continuation Sheets, if any.
- Item 3. Generator's Name and Mailing Address - Enter the complete name of the generator and the complete mailing address. The address should be the location that will manage the returned Manifest forms.
- Item A. State Manifest Document Number - This Number is preprinted, do not alter it. This Number must be placed in item L of each continuation sheet.
- Item B. State Gen. ID - Not required for PA Generators. See Note (above).
- Item 4. Generator's Phone Number - Enter the area code and telephone number where an authorized agent of the Generator may be contacted.
- Item 5. Transporter 1 Company Name - Enter the complete company name of the first transporter who will transport the waste.
- Item 6. US EPA ID Number - Enter the twelve digit US EPA Identification Number of the transporter identified in Item 5.
- Item C. State Trans. ID - Enter the Hazardous Waste Transporter License No. issued by PA Dept. of Environmental Resources. See Note (above).
- Item D. Transporter's Phone - Enter the area code and telephone number where an authorized agent of the Transporter may be contacted.
- Item 7. Transporter 2 Company Name - If applicable, see Item 5.
- Item 8. US EPA ID Number - If applicable, see Item 6.
- Item E. State Trans. ID - If applicable, see Item C.
- Item F. Transporter's Phone - If applicable, see Item D.
- Item 9. Designated Facility Name and Site Address - Enter the complete company name and complete site address of the facility designated to receive the waste listed on this Manifest. The address must be the site address, which may differ from the mailing address.
- Item 10. US EPA ID Number - Enter the twelve digit US EPA Identification Number of the Designated Facility.
- Item G. State Facility's ID - Not Required.
- Item H. Facility's Phone - Enter the area code and phone number where an authorized agent of the Designated Facility may be contacted.
- Item 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number (UN/NA Number)) - Enter the US DOT Proper Shipping Name, Hazard Class, and ID Number (UN/NA Number) for each waste as identified in 49 CFR 171 through 177.
- Item 12. Containers (No. and Type) - Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.
- Item 13. Total Quantity - Enter the total quantity of each waste. Do not use decimals or fractions.
- Item 14. Unit (Wt/Vol) - Enter the appropriate abbreviation from Table II (below) for the unit of measure.

Table I - Types of Containers

DM = Metal drums, barrels, kegs	DT = Dump truck
DW = Wooden drums, barrels, kegs	CY = Cylinders
DF = Fiberboard or plastic drums, barrels, kegs	CM = Metal boxes, cartons, cases (including roll-offs)
TP = Tanks portable	CW = Wooden boxes, cartons, cases
TT = Cargo tanks (tank trucks)	CF = Fiber or plastic boxes, cartons, cases
TC = Tank cars	BA = Burlap, cloth, paper or plastic bags

Table II - Units of Measure

G = Gallons (liquids only)	L = Liters (liquids only)
P = Pounds	K = Kilograms
T = Tons (2000 lbs)	M = Metric tons (1000 kg)
Y = Cubic yards	N = Cubic meters

- Item I. Waste No. - Enter the Hazardous Waste No. of the waste or wastes. Refer to Section 75.261 of the Department's Regulations. See Note (above). If a waste is not hazardous in PA but regulated by another State, enter that State's waste code. Also, enter in Item J, "This waste is not a hazardous waste according to PA law."
- Item J. Additional Descriptions for Materials Listed Above (include physical state and hazard code) - Enter the physical state of each waste (S-solid, L-liquid, SL-sludge or G-gas) and the hazard code or codes that correspond to the Hazardous Waste No. (I-ignitable, C-corrosive, R-reactive, E-EP-toxic; H-acute hazardous, and T-toxic). See Note (above).
- Item K. Handling Codes for Wastes Listed Above - Not required for PA Generators. See Note (above).
- Item 15. Special Handling Instructions and Additional Information - Use this space to indicate special transportation, treatment, storage, or disposal information or Bill of Lading information. For international shipments, enter the point of departure (City and State).
- Item 16. Generator's Certification - Read and sign by hand the certification statement. Enter the date the waste was shipped. If a mode other than highway is used, the word "highway" should be lined out and the appropriate mode (rail, water, or air) inserted in the space below. If another mode in addition to the highway mode is used, enter the appropriate additional mode (e.g., and rail) in the space below the certification statement.

TRANSPORTER

- Item 17. Transporter 1 Acknowledgement of Receipt of Materials - Print or type the name of the person accepting the waste on behalf of the transporter. Sign and enter the date of receipt.
- Item 18. Transporter 2 Acknowledgement of Receipt of Materials - If applicable, see Item 17.

DESIGNATED FACILITY

- Item 19. Discrepancy Indication Space - The Designated Facility's authorized representative must note in this space any significant discrepancy between the waste described on the Manifest and the waste actually received.
- Item 20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Print or type the name of the person accepting the waste on behalf of the owner or operator of the facility. Sign and enter the date of receipt.

US EPA ARCHIVE DOCUMENT

INSTRUCTIONS FOR HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL
(TSD) PERMIT APPLICATIONS

1. All TSD facility permit applications must be prepared in accordance with the Pennsylvania Hazardous Waste Management Regulations, Chapter 75, Subchapter D, as published on September 4, 1982. Information on the permit program is contained in Subsection 75.265(z); Section 75.264 addresses operation and design standards for all types of facilities.
2. Enclosed in this mailing is a reference checklist to assist you in verifying the completeness of your application. The checklist contains the minimum information acceptable to the Department for a permit application, therefore it should not be considered a substitute for reading and addressing the regulations themselves.
3. Because you may be anticipating multiple facilities at your location, you have received checklists for each type of facility. Complete and return with the application only those sections which apply to your facility. For each item that is provided, reference the page number or specific place in the application where it is addressed in the comments column. If the item is not provided, you should explain briefly in the comments column. Particular attention should be given to the Operational Concept Report, since this report will be essential in providing a detailed and integrated description of the hazardous waste activities at your facility.

The checklist contains sections on the following:

General Information (that applies to all facilities)

- A. General Requirements (one set for landfills, surface impoundments and land treatment, and another set for all other facilities)
- B. Waste Characteristics
- C. Security
- D. Inspection
- E. Personnel Training
- F. Preparedness, Prevention and Contingency Plan
- G. Ignitable, Reactive or Incompatible Wastes
- H. Financial Assurance Requirements (April 14, 1984)
- I. Closure

Specific Requirements (that apply only to the facilities indicated)

- J. Groundwater monitoring (for landfills, surface impoundments and land treatment only)
- K. Post-Closure (for all disposal facilities, except incinerators)

Specific Process Information (that apply to specific types of facilities)

- L. Containers
- M. Tanks
- N. Waste Piles
- O. Incinerators
- P. Landfills
- Q. Surface Impoundments
- R. Land Treatment

Note that there are no specific design standards for chemical, physical and biological treatment facilities due to their diversity. At a minimum, these facilities should meet the requirements for the equipment in which the treatment takes place, e.g., tanks.

4. Also enclosed are Modules 9 and 10, the Landowner Consent Form and a Part A Application, which are part of the General Information Requirements.
5. The application fees, which are listed in 75.265(z)(26) are cumulative. Your fee will be the sum of those listed for each type of facility for which you are applying for a permit.

PENNSYLVANIA HAZARDOUS WASTE TSD APPLICATION CHECKLIST

August, 1985

GENERAL REQUIREMENTS

For: Containers Thermal Treatment
 Tanks Incinerators
 Chemical, Physical, or Biological Treatment

Facility Name _____
 ID Number _____
 Facility Location _____
 PAGE NUMBER _____
 IN _____
 APPLICATION _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
1. Part A Application - Form ER-SWM-59	(265)(z)(11),(274)	—	—	—	_____	_____
2. Environmental Assessment Report - Module 9	(265)(z)(11),(18)(iv)	—	—	—	_____	_____
3. Compliance History Report - Module 10	(265)(z)(11),(18)(v)	—	—	—	_____	_____
4. Contractual Consent of Landowner	(265)(z)(11)(iii)	—	—	—	_____	_____
5. Certification	(280)(a)	—	—	—	_____	_____
A. Registered Professional Engineer seal on all reports and design drawings	(265)(z)(19)	—	—	—	_____	_____
B. Registered Professional Engineer seal and signature on title sheet	(265)(z)(19)	—	—	—	_____	_____
C. Certification paragraph with responsible official's signature	(265)(z)(13)(iii)	—	—	—	_____	_____
D. Signature of Principal Executive Officer or acceptable substitute	(265)(z)(13)(i)	—	—	—	_____	_____
6. Application Fees, check payable to Commonwealth of Pennsylvania	(265)(z)(11),(26)	—	—	—	_____	_____
A. Storage \$1,000	(265)(z)(26)(i)	—	—	—	_____	_____
B. Thermal treatment \$2,000	(265)(z)(26)(vi)	—	—	—	_____	_____
C. Chemical, physical, and biological treatment \$2,500	(265)(z)(26)(vii)	—	—	—	_____	_____
D. Incinerators \$2,500	(265)(z)(26)(viii)	—	—	—	_____	_____

GENERAL REQUIREMENTS (Continued)

For: Containers Thermal Treatment
 Tanks Incinerators
 Chemical, Physical, or Biological Treatment

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
7. Operational Concept Report, including descriptions of:	(265)(z)(18)(i)					
A. Hazardous waste facility and its relationship to the installation						
B. General facility description						
C. Daily operational methodology						
D. Expected waste types, sources and volumes						
E. Unit processes with detailed flow diagrams						
8. Site location map on 7.5' USGS map	(265)(z)(18)(ii)					
9. General arrangement plan(s) showing:	(265)(z)(18)(ii)					
A. Facility layout						
B. Buildings and structures						
C. Legal boundaries of the sites						
D. Access control						
E. Operational units						
F. Roads and loading/unloading areas						
G. Drainage or flood control barriers						
10. Topographic map(s) showing within 1/4 mile the following:	(265)(z)(21)(i)					
A. Public and private water supplies						
B. Wells, springs, swamps and other bodies of water						
C. 100-year floodplain						
D. Geologic and hydrologic features						
E. Gas and oil wells						
F. High tension powerline and pipeline right-of-ways						
G. Previously mined areas, adversely affected or anomalous areas						

GENERAL REQUIREMENTS (Continued)

For: Containers
Tanks

Thermal Treatment
Incinerators
Chemical, Physical, or Biological Treatment

Facility Name _____
ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
10. Topographic map(s) showing within $\frac{1}{4}$ mile the following (Continued):						
H. Traffic flow patterns		---	---	---	---	---
I. Surrounding land uses		---	---	---	---	---
11. Map and drawing requirements	(265)(z)(18)(ii)					
A. Maps are 30"x36" or smaller, clear and legible		---	---	---	---	---
B. Plans are 1" \leq 200', with 10' contour intervals		---	---	---	---	---
C. Sections and elevations have a horizontal scale 1" \leq 200' and vertical scale 1" \leq 10'		---	---	---	---	---
D. Grid is tied to a permanent fixed marker on-site		---	---	---	---	---
E. Vertical control tied to a benchmark elevation		---	---	---	---	---
F. Orientation of maps (north arrow)		---	---	---	---	---
G. Date and scale		---	---	---	---	---
12. Specifications, reports, or narratives that fully detail:	(265)(z)(18)(iii) (265)(z)(21)(iii)					
A. Construction and manufacturing design calculations		---	---	---	---	---
B. Quality control methods, procedures and tests to be used during construction		---	---	---	---	---
C. Specifications of construction information not shown on drawings that will be supplied to Contractor		---	---	---	---	---

GENERAL REQUIREMENTS (Continued)

For: Containers Thermal Treatment
 Tanks Incinerators
 Chemical, Physical, or Biological Treatment

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
13. Drawings and/or specifications with details relating to:	(265)(z)(21)(ii)					
A. Management of surface water						
B. Erosion control						
C. Revegetation procedures						
D. Site preparation						
E. Monitoring and measuring devices						
F. Location and limits of construction by grid controls						
G. Location, description and purpose of all easements existing on-site and a definition of all title, deed or usage restrictions						
H. Location of gas, oil and other wells and all utilities on-site						
I. Location of public and private water supplies on-site						
J. Cross-sections shown on drawings and referenced to the grid system for horizontal location, whenever applicable						
K. Grades required for drainage of property						
L. Cross-sections of the access roads and all weather roads, identifying construction materials, slopes, grades and/or profiles						
M. Cross-sections, grades and/or profiles of surface drainage diversion ditches, capacities and calculations for ditch volume						
N. Process and instrumentation diagrams for unit processes to be employed at facility						
O. Wind rose						

GENERAL REQUIREMENTS (Continued)

For: Containers Thermal Treatment
 Tanks Incinerators
 Chemical, Physical, or Biological Treatment

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
14. For facilities located in a 100-year flood plain information demonstrating that the facility is designed, constructed, operated and maintained to prevent washout of hazardous waste, including:	(265)(z)(22)(ii)	---	---	---	_____	_____
A. Hydrodynamic and hydrostatic force analysis	(265)(z)(22)(ii)(A)	---	---	---	_____	_____
B. Structural methods of preventing washout	(265)(z)(22)(ii)(B)	---	---	---	_____	_____
C. OR, a description of emergency procedures to remove the hazardous waste prior to a flood	(265)(z)(22)(ii)(C)	---	---	---	_____	_____

PENNSYLVANIA HAZARDOUS WASTE TSD APPLICATION CHECKLIST

GENERAL REQUIREMENTS - PHASE I

For: Landfills Surface Impoundments Land Treatment	Waste Piles	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	Facility Name _____ ID Number _____ Facility Location _____ PAGE NUMBER IN APPLICATION	COMMENTS
REQUIREMENTS	SECTION					
1. Part A Application - Form ER-SWM-59	(265)(z)(11),(274)	---	---	---		
2. Environmental Assessment Report-Module 9	(265)(z)(11),(20)(i)(D)	---	---	---		
3. Compliance History Report-Module 10	(265)(z)(11),(18)(v)	---	---	---		
4. Contractual Consent of Landowner	(265)(z)(11)(iii)	---	---	---		
5. Certification	(280)(a)					
A. Registered Professional Engineer seal on all reports and design drawings	(265)(z)(19)	---	---	---		
B. Registered Professional Engineer seal and signature on title sheet	(265)(z)(19)	---	---	---		
C. Certification paragraph with responsible officials signature	(265)(z)(13)(iii)	---	---	---		
D. Signature of Principal Executive Officer or acceptable substitute	(265)(z)(13)(i)	---	---	---		
6. Application fee, check payable to Commonwealth of Pennsylvania	(265)(z)(11),(26)	---	---	---		
A. Surface impoundment-\$3500	(265)(z)(26)(ii)	---	---	---		
B. Landfill-\$5000	(265)(z)(26)(v)	---	---	---		
C. Land treatment-\$3500	(265)(z)(26)(iv)	---	---	---		
D. Waste pile-\$1000	(265)(z)(26)(iii)	---	---	---		
7. Site location map on 7.5' USGS map	(265)(z)(18)(ii)	---	---	---		

GENERAL REQUIREMENTS - PHASE I

**For: Landfills
Surface Impoundments**

**Land Treatment
Waste Piles**

**Facility Name _____
ID Number _____**

**PROVIDED Y/N
ADEQUATE Y/N
NOT APPLICABLE**

**PAGE NUMBER
IN
APPLICATION**

COMMENTS

REQUIREMENTS

SECTION

8. 7.5' topographic map showing within 1/4 mile of the property boundaries:

- A. On-site and off-site borrow areas
- B. Public and private water supplies
- C. Wells, springs, streams, swamps, other bodies of water
- D. Gas and oil wells
- E. High-tension power line or pipeline right-of-way
- F. Hydrologic and geologic features
- G. Location of 100 year flood plain
- H. Previously mined areas or adversely affected or anomalous areas
- I. Traffic flow patterns
- J. Surrounding land uses

- (265)(z)(20)(i)(A),(B)

9. Soils, geologic, and groundwater report, including:

- A. Description of borings and/or wells
- B. Water table contour map
- C. Detailed soil descriptions

(265)(z)(20)(i)(C)

10. Operational Concept Report, including brief descriptions of:

- A. Hazardous waste facility and its relationship to the installation
- B. General facility description
- C. Facility operations, methods and practices
- D. Daily operational methodology
- E. Written operational plans
- F. Expected waste types, sources and volumes
- G. Unit processes with detailed flow diagrams

(265)(z)(20)(i)(E)

PENNSYLVANIA HAZARDOUS WASTE TSD APPLICATION CHECKLIST

GENERAL REQUIREMENTS - PHASE II

**For: Landfills
Surface Impoundments**

**Land Treatment
Waste Piles**

Facility Name _____
ID Number _____
Facility Location _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. Reports or narratives and specifications that fully detail:	(265)(z)(20)(ii)(B)					
A. The operations, methods and practices, and all unit processes to be employed at the facility						
B. Waste types, volumes, and sources						
C. All plans required by these regulations that affect the proposed facility and its operations						
D. Quality control methods, procedures, and tests to be used during construction						
E. Specifications including, but not limited to, all construction information not shown on the drawings						
F. Other reports, narratives or specifications as required by the Department						
2. Certification	(280)(a)					
A. Registered Professional Engineer seal on all reports and design drawings	(265)(z)(19)					
B. Registered Professional Engineer seal and signature on title sheet	(265)(z)(19)					
C. Certification paragraph with responsible official's signature	(265)(z)(13)(iii)					
D. Signature of Principal Executive Officer or acceptable substitute	(265)(z)(13)(i)					

GENERAL REQUIREMENTS - PHASE II

For: Landfills
Surface Impoundments

Land Treatment
Waste Piles

Facility Name _____
ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
3. General arrangement plans showing:	(265)(z)(18)(ii)					
A. Facility layout						
B. Buildings, structures and operational units						
C. Legal site boundaries						
D. Access control						
E. Roads and loading/unloading areas						
F. Drainage or flood control barriers						
4. Drawings and/or specifications with details relative to:	(265)(z)(20)(ii)(A)					
A. Compaction of solid waste						
B. Application of daily cover material						
C. Elevations and grades of final cover						
D. Management of surface water						
E. Erosion control						
F. Revegetation procedures to be used						
G. Schedule of fillings						
H. Site preparations						
I. Monitoring and measuring devices						
J. Location and limits of areas previously filled						
K. Cross sections indicating the interface details between areas previously filled and areas to be filled, where applicable						
L. Limits of construction defined by grid controls						
M. Borrow areas on-site defined by grid controls						
N. Location, description, and purpose of all easements existing on-site and a definition of all title, deed, or usage restrictions relative to the site						

GENERAL REQUIREMENTS - PHASE II

For: Landfills
Surface Impoundments

Land Treatment
Waste Piles

Facility Name _____
ID Number _____

PAGE NUMBER
IN
APPLICATION

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
4. Drawings and/or specifications with details relative to (Continued):						
O. Location of gas, oil and other wells and all utilities on-site						
P. Location of public and private water supplies on-site						
Q. Location of underground and surface mines on-site						
R. Cross sections shown on the plans and referenced to the grid system for horizontal location, whenever applicable						
S. Grades for drainage of the facility						
T. Cross sections of the access roads and all weather roads, identifying construction materials, slopes, grades, and distances						
V. Grades indicating the depth of soil available at the site for suitable cover material						
W. A construction schedule in a format established by the Department						
X. Process and instrumentation diagrams for unit processes to be employed at the facility						
Y. Ground-water contour map						
Z. Wind rose						
5. Map and drawing requirements	(265)(z)(18)(ii)					
A. Maps are 30" x 36" or smaller, clear and legible						
B. Plans are 1" \leq 200', with 10' contour intervals						

GENERAL REQUIREMENTS - PHASE II

For: Landfills
Surface Impoundments

Land Treatment
Waste Piles

Facility Name _____
ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
5. Map and drawing requirements (Continued):						
C. Sections and elevations have a horizontal scale 1" \leq 200' and vertical scale 1" \leq 10'						
D. Design drawings have a grid/coordinate control system, grid \leq 200 square feet sections						
E. Grid is tied to a permanent fixed marker on-site						
F. Vertical control tied to a benchmark elevation						
G. Orientation of maps (north arrow)						
H. Date and scale						

WASTE CHARACTERISTICS - FOR: ALL FACILITIES

Facility Name _____
ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. For each hazardous waste stored, treated or disposed:	(264)(c)(1)	---	---	---		
A. A general description of the waste		---	---	---		
B. EPA Hazardous waste number		---	---	---		
C. Hazard characteristics		---	---	---		
D. Basis for hazard designation		---	---	---		
E. Laboratory report detailing the chemical and physical analyses of representative samples		---	---	---		
<u>OR</u> a complete Module 1 for each hazardous waste (required for facilities receiving off-site wastes)		---	---	---		
2. A copy of the Waste Analysis Plan	(264)(c)(3)	---	---	---		
3. Liner compatibility test results (if applicable) for each hazardous waste	(264)(c)(4)	---	---	---		

IGNITABLE, REACTIVE OR INCOMPATIBLE WASTES - FOR: ALL FACILITIES

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. Description of precautions taken to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes, including:	(264)(g)	---	---	---		
A. Provisions to protect waste from sources of ignition or reaction	(264)(g)(1)	---	---	---		
B. Special handling procedures for storing, treating, disposing or mixing	(264)(g)(2)	---	---	---		
C. Other specific process requirements	(264)(g)(2)	---	---	---		
i. Containers	(264)(q)(2,7,8,9)	---	---	---		
ii. Tanks	(264)(r)(2,3,10,11,12)	---	---	---		
iii. Waste Piles	(264)(t)(28,29)	---	---	---		
iv. Landfills	(264)(v)(4)(ii,iii)	---	---	---		

IGNITABLE, REACTIVE OR INCOMPATIBLE WASTES - FOR: ALL FACILITIES

REQUIREMENTS	SECTION	PROVIDED	ADEQUATE	NOT APPLICABLE	Facility Name _____	ID Number _____	PAGE NUMBER IN APPLICATION	COMMENTS
1. Description of precautions taken to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes, including (Continued):								
C. Other specific process requirements (Continued):								
v. Surface impoundments	(264)(s)(4)(i,ii,iv,v)	---	---	---				
vi. Land Treatment	(264)(u)(28,29)	---	---	---				
vii. Chemical, physical or biological treatment	(265)(y)(9),(8)	---	---	---				

SECURITY - FOR: ALL FACILITIES

REQUIREMENTS	SECTION	PROVIDED	ADEQUATE	NOT APPLICABLE	Facility Name _____	ID Number _____	PAGE NUMBER IN APPLICATION	COMMENTS
1. Description of security procedures and equipment								
A. 24-hour surveillance system or	(264)(d)(2)	---	---	---				
B. Artificial or approved natural barrier		---	---	---				
C. Warning signs		---	---	---				
2. In lieu of the above, demonstration that intrusion would not cause injury or violation of RCRA	(264)(d)(1)	---	---	---				

INSPECTION - FOR: ALL FACILITIES

PROVIDED Y/N
 ADEQUATE Y/N
 NOT APPLICABL

Facility Name _____
 ID Number _____

PAGE NUMBER
 IN
 APPLICATION

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABL	PAGE NUMBER IN APPLICATION	COMMENTS
1. Copy of the general inspection schedule kept at the facility for security devices and monitoring, safety, emergency, operating, and structural equipment	(264)(e)(2),(3)	---	---	---	---	---
A. Identification of types of problems to be inspected		---	---	---	---	---
B. Frequency of inspections		---	---	---	---	---
2. Specific process inspection requirements for:						
A. Containers	(264)(q)(5)	---	---	---	---	---
B. Tanks	(264)(r)(8)	---	---	---	---	---
C. Waste Piles	(264)(t)(18)	---	---	---	---	---
D. Incinerators	(264)(w)(9)(v)	---	---	---	---	---
E. Surface Impoundments	(264)(s)(4)(iii)	---	---	---	---	---
F. Loading and unloading areas	(264)(e)(3)	---	---	---	---	---
G. Landfills	(264)(v)(4)(xix)	---	---	---	---	---
H. Land treatment facilities	(264)(u)(16)	---	---	---	---	---
3. Description of remedial action procedures	(264)(e)(4)	---	---	---	---	---
4. Copy of the inspection log	(264)(e)(5)	---	---	---	---	---
5. Construction schedule and description of quality control procedures, tests and inspections	(264)(e)(6)	---	---	---	---	---

PERSONNEL TRAINING - FOR: ALL FACILITIES

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICAB	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. Description of introductory and continuing training programs	(264)(f)(1, 4, 5)	---	---	---		
2. An outline of the training program which briefly describes:						
A. Job titles and duties of each employee position requiring training	(264)(f)(6)	---	---	---		
B. Content, frequency, and technique used in both introductory and continuing training for each employee		---	---	---		
C. Training directors qualifications	(264)(f)(2)	---	---	---		
D. Relevance of training to job position	(264)(f)(2)	---	---	---		
E. Training for hazardous waste management	(264)(f)(2)	---	---	---		
F. Training for contingency plan implementation	(264)(f)(2)	---	---	---		
G. Training for emergency response, including:	(264)(f)(3)	---	---	---		
i. Procedures for using, inspecting, repairing and replacing facility monitoring and emergency equipment		---	---	---		
ii. Key parameters for automatic cutoff systems		---	---	---		
iii. Communications or alarm systems		---	---	---		
iv. Response to fires or explosions		---	---	---		
v. Response to ground water contamination incidents		---	---	---		
vi. Shutdown of operations		---	---	---		
3. Provisions for implementing and maintaining the training program including annual update and training for new employees		---	---	---		

PERSONNEL TRAINING - FOR: ALL FACILITIES (Continued)

Facility Name _____
ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
4. Sample personnel training record forms and provisions for maintaining these documents	(264)(f)(7),(6)					

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN (PPC) - FOR: ALL FACILITIES

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED	ADEQUATE	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. A copy of the PPC plan addressing the following:	(264)(i) and "Guidelines for Development and Implementation of PPC Plans"	---	---	---	---	---
A. General description of the industrial or commercial activity		---	---	---	---	---
B. Organizational structure for implementation of the PPC Plan		---	---	---	---	---
C. Material and waste inventory		---	---	---	---	---
D. Plant operations		---	---	---	---	---
E. Material compatibility		---	---	---	---	---
F. Inspection and monitoring program		---	---	---	---	---
G. Preventive maintenance		---	---	---	---	---
H. Housekeeping program		---	---	---	---	---
I. Security		---	---	---	---	---
J. External factors		---	---	---	---	---
K. Internal and external communications		---	---	---	---	---
L. Employee training program		---	---	---	---	---
M. List of emergency coordinators		---	---	---	---	---
N. Duties and responsibilities of the emergency coordinator		---	---	---	---	---
O. Chain of command		---	---	---	---	---
P. List of agencies to be notified		---	---	---	---	---
Q. Emergency equipment		---	---	---	---	---
R. Provisions for water at adequate pressure and volume		---	---	---	---	---
S. Aisle space		---	---	---	---	---
T. Evacuation plan for installation personnel		---	---	---	---	---
U. Arrangements with emergency response contractors		---	---	---	---	---
V. Agreements with state and local emergency response teams and hospitals		---	---	---	---	---
W. Pollution incident history		---	---	---	---	---
X. Implementation schedule		---	---	---	---	---
Y. Amendments as required by process		---	---	---	---	---

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN (PPC) - FOR ALL FACILITIES (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
1. A copy of the PPC plan addressing the following (Continued)						
Z. Procedures, structures, or equipment used at the facility to:						
(i) Prevent hazards in unloading operations						
(ii) Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding						
(iii) Prevent contamination of water supplies						
(iv) Mitigate effects of equipment failure and power outages						
(v) Prevent undue exposure of personnel to hazardous waste						

CLOSURE - FOR: ALL FACILITIES

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	Facility Name _____	COMMENTS
					ID Number _____	
					PAGE NUMBER	
					IN	
					APPLICATION	
1. A copy of the closure plan, including:	(264)(o)(3)	---	---	---		
A. If applicable, a description of partial closure including partial closure activities	(264)(o)(3)(i)	---	---	---		
B. A description of final closure activities and how these will be conducted according to the regulations	(264)(o)(3)(i)	---	---	---		
C. A description of the maximum waste inventory in storage and treatment at any time during the life of the facility	(264)(o)(3)(ii)	---	---	---		
D. A description of how closure minimizes the need for post-closure maintenance and minimizes the release of wastes	(264)(o)(2)	---	---	---		
E. An estimate of the schedule for final closure, including the expected year of closure and the total time required for closure activities	(264)(o)(3)(iv)	---	---	---		
F. A description of procedures for the disposal or decontamination of equipment	(264)(o)(3)(iii)	---	---	---		
G. Specific closure procedures as required by subsection	(264)(o)(3)(i)	---	---	---		
i. Containers	(264)(q)(13)	---	---	---		
ii. Tank	(264)(r)(40),(9)	---	---	---		
iii. Waste Piles	(264)(t)(34,35)	---	---	---		
iv. Incinerators	(264)(w)(10)	---	---	---		
v. Landfills	(264)(v)(3)(xxvi)	---	---	---		
vi. Surface impoundments	(264)(s)(3)(xxx,xxxi)	---	---	---		
vii. Land treatment	(264)(u)(17,18,24,25)	---	---	---		
viii. Thermal treatment	(265)(x)(5)	---	---	---		
ix. Chemical, physical or biological treatment	(265)(y)(7)	---	---	---		

POSTCLOSURE

For: All disposal facilities, except incinerators

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. A copy of the postclosure plan identifying activities to be conducted after closure and their frequency, including:	(264)(o)(16)	---	---	---		
A. Groundwater monitoring and reporting program	(264)(o)(16)(i)	---	---	---		
B. Planned maintenance activities	(264)(o)(16)(ii)	---	---	---		
C. Name, address and phone number of person or office for contact after closure	(264)(o)(16)(iii)	---	---	---		
2. A photocopy of the notation in the deed referring to hazardous waste activities on the site	(264)(o)(20)	---	---	---		

FINANCIAL ASSURANCE - FOR: ALL FACILITIES

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. Bond filed on proper form with proper collateral or surety company	(311)(a)	---	---	---		
2. Cost estimate for closure and post-closure care	(319)(a)	---	---	---		
3. Proof of insurance filed for sudden accidental liability	(332)(a),(334)	---	---	---		
4. Proof of insurance filed for non-sudden accidental liability	(332)(b),(334)	---	---	---		

GROUNDWATER MONITORING PROGRAM

For: Landfills
Surface Impoundments

Land Treatment
Waste Piles

Facility Name _____
ID Number _____

PROVIDED Y/N
ADEQUATE Y/N
NOT APPLICABLE

PAGE NUMBER
IN
APPLICATION

COMMENTS

REQUIREMENTS

SECTION

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
1. Ground-water monitoring system capable of detecting the entry of any hazardous waste, hazardous constituents or decomposition by products	264(n)(1,2)	---	---	---	---	---
2. Copy of ground water quality assessment outline capable of determining:	264(n)(3)(i-iii)	---	---	---	---	---
A. Which hazardous constituents entered g.w.,		---	---	---	---	---
B. Rate and extent of migration		---	---	---	---	---
C. Concentrations of constituents		---	---	---	---	---
3. Description of the monitoring system consisting of:	264(n)(4)(i-iv) or 264(n)(5)	---	---	---	---	---
A. At least one upgradient well		---	---	---	---	---
B. At least three down gradient wells		---	---	---	---	---
C. Locations and ID of each well shown on map (none greater than 200 feet from edge of waste management area)		---	---	---	---	---
4. Description of how each waste management component is monitored	264(n)(6)	---	---	---	---	---
5. Description of required well casing:	264(n)(7),(8)	---	---	---	---	---
A. Screened and gravel or sand packed		---	---	---	---	---
B. Annular space sampling depth sealed		---	---	---	---	---
C. Outer protective casing present as required		---	---	---	---	---
D. Cap with lock present		---	---	---	---	---

GROUNDWATER MONITORING PROGRAM

**For: Landfills
Surface Impoundments**

**Land Treatment
Waste Piles**

**Facility Name _____
ID Number _____**

**PROVIDED Y/N
ADEQUATE Y/N
NOT APPLICABLE**

**PAGE NUMBER
IN
APPLICATION**

COMMENTS

REQUIREMENTS

SECTION

6.	Copy of ground water sampling and analysis plan kept at facility outlining procedures and techniques for: A. Sample collection B. Sample preservation and shipment C. Analytical procedures D. Chain-of-custody	264(n)(9),(10)	---	---	---	_____	_____
7.	Minimum list of test parameters to include at least, pH, TOC, SpC, and TOH	264(n)(11)	---	---	---	_____	_____
8.	For existing facilities, copy of background concentrations for upgradient well sites	264(n)(12)(i-iii) 264(n)(13)(i-ii) and 264(n)(14)	---	---	---	_____	_____
9.	For new facilities, a description of how background concentrations will be collected	264(n)(12)(i-iii) 264(n)(13)(i-ii) and 264(n)(14)	---	---	---	_____	_____
10.	A description of the statistical procedure to be followed in evaluating the ground-water data	264(n)(17)-(19)	---	---	---	_____	_____

CONTAINERS

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
1. Containers	(264)(q)(1-6)	—	—	—	—	—
A. For each containers type:						
i. Containerized waste(s) (EPA hazardous waste number)	(264)(q)(1-6)	—	—	—	—	—
ii. DOT shipping container specification number	(264)(q)(1-6)	—	—	—	—	—
iii. Capacity and dimensions	(264)(q)(1-6)	—	—	—	—	—
iv. Materials of construction	(264)(q)(1-6)	—	—	—	—	—
v. Type of container	(264)(q)(1-6)	—	—	—	—	—
vi. Maximum number of containers	(264)(q)(1-6)	—	—	—	—	—
B. Description of container management practices (opening, handling and inspection procedures) to insure container integrity	(264)(q)(1-6)	—	—	—	—	—
2. Container Storage Area - Design and operation specifications for secondary containment system including drawings of all design aspects of the system, and	(264)(q)(10)	—	—	—	—	—
A. Demonstration of structural integrity of underlying base and ability of base to contain leaks, spills and accumulated precipitation	(264)(q)(10)	—	—	—	—	—
B. Description of how containers are kept from contact with standing liquids (drainage)	(264)(q)(10)	—	—	—	—	—
C. Containment system capacity relative to number and volume of stored containers	(264)(q)(10)	—	—	—	—	—
D. Containment system provisions for preventing run-on	(264)(q)(11)	—	—	—	—	—
E. Testing and management procedures for accumulated liquids	(264)(q)(12)	—	—	—	—	—

CONTAINERS (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
3. Description of container storage configuration meeting minimum requirements for:						
A. Setback	(264)(q)(14)	—	—	—	_____	_____
B. Height, width	(264)(q)(14)	—	—	—	_____	_____
C. Aisle space	(264)(q)(14)	—	—	—	_____	_____
4. Sample inspection form outlining inspection techniques, correction procedures and schedule		—	—	—	_____	_____
5. Special procedures for treating, storing, and handling potentially incompatible wastes, including separation and protection of containers	(264)(q)(7,8,9) (264)(g)(2)	—	—	—	_____	_____
6. Special procedures for treating, storing, and handling ignitable waste and reactive wastes	(264)(q)(14) (264)(g)(2)	—	—	—	_____	_____
7. For facilities receiving wastes from off-site, a description of the weighing or measuring facilities	(264)(q)(6)	—	—	—	_____	_____
8. Special closure requirements	(264)(q)(13)	—	—	—	_____	_____
9. 50' setback from the property line for ignitable or reactive wastes	(264)(q)(15)	—	—	—	_____	_____

TANKS

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABL	PAGE NUMBER	COMMENTS
					IN APPLICATION	
1. Tank dimensions, capacity, shell thickness and strength	(264)(r)(15)	---	---	---		
2. References to design standards or other information used in tank design	(264)(r)(15)	---	---	---		
3. Description of design specifications, including identification of construction and lining materials for assessment of corrosion and erosion potential	(264)(r)(3,15)	---	---	---		
4. Diagram of piping, instrumentation, and process flow	(264)(r)(15)	---	---	---		
5. Description of feed systems, safety cut-off, by-pass systems, pressure controls, and alarm systems	(264)(r)(5,16)	---	---	---		
6. For above ground and partially above ground tanks, containment structure design information	(264)(r)(6)	---	---	---		
7. Uncovered tanks: freeboard or overflow alarm/system	(264)(r)(4)	---	---	---		
8. Special procedures for treating, storing, and handling potentially incompatible wastes	(264)(r)(2,7,12,13)	---	---	---		
9. Special procedures for treating, storing, and handling ignitable waste and reactive wastes	(264)(g)(2) (264)(r)(10,11)	---	---	---		
10. Run-off collection and management system, including supporting calculations	(264)(r)(29)	---	---	---		

TANKS (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
11. Measures to prevent run-on	(264)(r)(30)	---	---	---	---	---
12. Surface water management system	(264)(r)(28)	---	---	---	---	---
13. Vector, Odor and Noise Control (VONC) Plan	(264)(r)(34)	---	---	---	---	---
14. Provision of 50' buffer zone between hazardous waste facility and property line	(264)(r)(27)	---	---	---	---	---
15. Inspection procedures for assessing tank condition; capable of detecting cracks, leaks, corrosion, erosion or wall thinning	(264)(r)(8),(14)	---	---	---	---	---
16. TER Plan	(264)(r)(23)	---	---	---	---	---
17. Access road dimensions and construction description	(264)(r)(26)	---	---	---	---	---
18. List of equipment and standby equipment used in operation of the facility	(264)(r)(35,36)	---	---	---	---	---
19. Description of unloading areas	(264)(r)(37)	---	---	---	---	---
20. Measures to control dust and waste tracking	(264)(r)(38,39)	---	---	---	---	---
21. For facilities receiving wastes from off-site, a description of the weighing or measuring facilities	(264)(r)(17)	---	---	---	---	---
22. Special closure requirements	(264)(r)(9,40)	---	---	---	---	---

INCINERATORS

Facility Name _____
 ID Number _____

REQJIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABI	PAGE NUMBER IN APPLICATION	COMMENTS
1. Incinerator Plan Approval Application - Bureau of Air Quality Form ER-AQ-16						
2. The trial burn plan, which includes the following information:	(264)(w)(27)(i)					
A. An analysis of each waste or mixture of wastes to be burned which includes:	(264)(w)(3)(i)					
i. Heating value						
ii. Viscosity						
iii. An identification of hazardous organic constituents						
iv. An approximate quantification of the hazardous consituents						
v. Other general properties (moisture, ash, density, PCB, and flash point)						
vi. Ultimate analysis (carbon, hydrogen, oxygen, nitrogen, water, phosphorus, bromine, chlorine, fluorine, arsenic, beryllium, lead, mercury, cadmium, chromium, and remainder as ash)						
vii. Sample data, methods, description and collection information						
viii. Analytical data, techniques and laboratory information						
B. A detailed engineering description of the incinerator for which the permit is sought including the following information:	(264)(w)(27)(ii)					
i. Manufacturer's name and model number of incinerator (if available)						

INCINERATORS (Continued)

Facility Name _____
 ID Number _____

PAGE NUMBER
 IN
 APPLICATION

REQ JIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	COMMENTS
B. A detailed engineering description of the incinerator for which the permit is sought including the following information (Continued):					
ii. Type of incinerator					
iii. Linear dimensions of the incinerator unit including the cross sectional area of combustion chamber					
iv. Description of the auxiliary fuel system - type/feed					
v. Capacity of prime mover					
vi. Description of automatic waste feed cut-off systems					
vii. Stack gas monitoring and pollution control equipment					
viii. Nozzle and burner design					
ix. Construction materials					
x. Location and description of temperature, pressure, and flow indicating and control devices					
C. A detailed description of the sampling and monitoring procedures, including:	(264)(w)(27)(iii)				
i. Sampling and monitoring locations					
ii. The equipment to be used					
iii. Frequency					
iv. Procedures for sample analysis					

INCINERATORS (Continued)

Facility Name _____
 ID Number _____

REQ JIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICAB	PAGE NUMBER IN APPLICATION	COMMENTS
D. A detailed test schedule for each waste, including date(s), duration and quantities of waste to be burned	(264)(w)(27)(iv)	—	—	—	—	—
E. A detailed test protocol, including, for each waste identified:	(264)(w)(27)(v)	—	—	—	—	—
i. Temperature ranges		—	—	—	—	—
ii. Waste feed rate		—	—	—	—	—
iii. Combustion gas velocity		—	—	—	—	—
iv. Use of auxiliary fuel		—	—	—	—	—
F. A description of, and planned operating conditions for, emission control equipment which will be used	(264)(w)(27)(vi)	—	—	—	—	—
G. Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction	(264)(2)(27)(vii)	—	—	—	—	—
H. For new incinerators, a statement identifying suggested conditions to comply with (264)(w)(6-7)	(264)(w)(27)(viii)	—	—	—	—	—
3. Results from each approved trial burn, including:	(264)(w)(29)(i)	—	—	—	—	—
A. A quantitative analysis of the trial POHCs in the waste feed to the incinerator		—	—	—	—	—
B. A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen (O ₂) and hydrogen halide		—	—	—	—	—

INCINERATORS (Continued)

Facility Name _____
 ID Number _____

PAGE NUMBER
 IN
 APPLICATION

COMMENTS

PROVIDED Y/N

ADEQUATE Y/N

NOT APPLICABLE

SECTION

REQUIREMENTS

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
C. A quantitative analysis of the scrubber water						
D. A computation of destruction and removal efficiency (DRE)						
E. A computation of the hydrogen halide removal efficiency						
F. A computation of particulate emissions						
G. An identification of sources of fugitive emissions and their means of control						
H. A measurement of average, maximum, and minimum temperatures and combustion gas velocity						
I. A continuous measurement of carbon monoxide (CO) in the exhaust gas						
J. Other relevant data as necessary						
K. Certification that the trial burn has been conducted according to the approved plan	(264)(w)(29)(ii)					
4. In lieu of a trial burn, the following:	(264)(w)(7)					
A. A description and analysis of the waste to be burned, compared with the waste for which data are provided to support the contention that a trial burn is not needed, which includes:						
i. Heating value						

INCINERATORS (Continued)

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
C. A description of the results from previously conducted trial burns, including (Continued):						
iii. Identification of hazardous combustion by-products						
D. The expected incinerator operation information demonstrating compliance with (264)(w)(6,7) including:						
i. Expected carbon monoxide (CO) level in the stack exhaust gas						
ii. Waste feed rate						
iii. Indication of combustion gas velocity and temperature						
iv. Expected stack gas volume, flow rate, and temperature						
v. Computed residence time for waste in the combustion zone						
vi. Expected hydrogen halide removal efficiency						
vii. Expected fugitive emissions and their control procedures						
viii. Proposed waste feed cut-off limits based on the identified significant operating parameters						
5. Provision for obtaining Department approval for disposal of ash, scrubber, water residues, scrubber water and other residues	(264)(w)(11)					

Facility Name _____
ID Number _____

INCINERATORS (Continued)

		PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	Facility Name _____ ID Number _____ COMMENTS
REQUIREMENTS	SECTION					
6. Provision of 50' buffer zone between hazardous waste facility and property line	(264)(w)(13)	—	—	—	_____	_____
7. Odor and noise control program description	(264)(w)(17)	—	—	—	_____	_____
8. Access road dimensions and construction description	(264)(w)(22)	—	—	—	_____	_____
9. List of equipment and standby equipment used in operation of the facility	(264)(w)(18,19)	—	—	—	_____	_____
10. Description of unloading areas	(264)(w)(20)	—	—	—	_____	_____
11. Measures to control waste tracking	(264)(w)(21)	—	—	—	_____	_____
12. For facilities receiving wastes from off-site, a description of the weighing or measuring facilities	(264)(w)(23)	—	—	—	_____	_____
13. Special closure requirements	(264)(w)(10)	—	—	—	_____	_____

SURFACE IMPOUNDMENTS

Facility Name _____
 ID Number _____

PAGE NUMBER
 IN
 APPLICATION

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	COMMENTS
1. Design drawings, specifications and referenced standards pertaining to the surface impoundment, including:	(264)(s)(3)	---	---	---	_____
A. Dimensions, capacity		---	---	---	_____
B. Freeboard	(264)(s)(3)(i)	---	---	---	_____
C. Surface grades	(264)(s)(3)(vii)	---	---	---	_____
D. Dikes, berms	(264)(s)(3)(ii, xvi, xviii, xix)	---	---	---	_____
E. Materials of construction		---	---	---	_____
F. Static and dynamic loadings	(264)(s)(3)(xiii)	---	---	---	_____
G. Construction procedures		---	---	---	_____
H. Perimeter markings	(264)(s)(3)(xxiii)	---	---	---	_____
I. Wind control	(264)(s)(4)(xiii)	---	---	---	_____
J. Piping, feed shutoff	(264)(s)(3)(xiv)	---	---	---	_____
K. Seasonal and ground water table provisions	(264)(s)(3)(xxii)	---	---	---	_____
L. Cap	(264)(s)(3)(xvii)(F)	---	---	---	_____
M. Daily and intermediate cover	(264)(s)(3)(x, xi)	---	---	---	_____
N. Gas venting	(264)(s)(3)(xii)	---	---	---	_____
O. Surface water management	(264)(s)(3)(viii)and (4)(xv)	---	---	---	_____
P. Run-on water diversion	(264)(s)(3)(ix)	---	---	---	_____
Q. Groundwater protection	(264)(s)(3)(xv)	---	---	---	_____
2. Liner system design drawings and specifications including:	(264)(s)(3)(xvii)	---	---	---	_____
A. Subbase design		---	---	---	_____
B. Primary top liner		---	---	---	_____
C. Secondary (bottom) liner		---	---	---	_____
D. Slopes		---	---	---	_____
E. Leachate detection zone system		---	---	---	_____
F. Protective cover zone		---	---	---	_____
G. Material and installation information	(264)(s)(3)(xx, xxi)	---	---	---	_____

SURFACE IMPOUNDMENTS (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
3. Leachate collection and storage system details, including:	(264)(s)(3)(xxiv)					
A. Storage capacity						
B. Storage						
C. Piping system						
D. Containment system (sump)						
4. Leachate/Run-off treatment system design	(264)(s)(3)(xxix)					
5. Inspection procedures for assessing surface impoundment and components condition	(264)(s)(4)(iii)					
6. Inspection schedule during construction and while in operation						
7. SIER (Surface Impoundment Evaluation and Repair) Plan	(264)(s)(4)(x)					
8. Special procedures for treating, storing and handling potentially incompatible wastes	(264)(s)(4)(i,ii,v)					
9. Special procedures for treating, storing, and handling ignitable or reactive wastes	(264)(s)(4)(iv)					
10. Provision of 50' buffer zone between hazardous waste facility and property line	(264)(s)(3)(vi)					
11. Vector, Odor, and Noise Control (VONC) Plan	(264)(s)(4)(xiv)					
12. Access road dimensions and construction description	(264)(s)(3)(iii)					
13. List of equipment and standby equipment used in operation of the facility	(264)(s)(4)(xvi,xvii)					

SURFACE IMPOUNDMENTS (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABL.	PAGE NUMBER IN APPLICATION	COMMENTS
14. Description of unloading area design and operation	(264)(s)(4)(xviii,xix)	---	---	---	---	---
15. Measures to control dust and waste tracking	(264)(s)(4)(xx,xxi)	---	---	---	---	---
16. Design and management procedures to prevent overtopping	(264)(s)(3)(iv)	---	---	---	---	---
17. For facilities receiving wastes from off-site, a description of the weighing or measuring facilities	(264)(s)(3)(xxx,xxxi)	---	---	---	---	---
18. Special closure and postclosure requirements	(264)(s)(3)(xxxii)	---	---	---	---	---
19. Dike stability certification						

WASTE PILES

Facility Name _____
 ID Number _____

PAGE NUMBER
 IN
 APPLICATION

REGIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	COMMENTS
1. Design specifications of the pile base and liner system, including:					
A. Estimate of subbase loadings and a description of the foundation design	(264)(t)(4)	---	---	---	_____
B. Liner material, permeability, thickness, strength	(264)(t)(4)	---	---	---	_____
C. Estimated liner life	(264)(t)(5)	---	---	---	_____
D. Estimated waste pile life	(264)(t)(5)	---	---	---	_____
E. Protection from plant growth	(264)(t)(6)	---	---	---	_____
F. Construction materials and installation procedures	(264)(t)(4,18)	---	---	---	_____
G. Seasonal and ground water table considerations	(264)(t)(7)	---	---	---	_____
H. Perimeter requirements	(264)(t)(36)	---	---	---	_____
I. Ground water protection	(264)(t)(2,33)	---	---	---	_____
2. Description of leachate and run-off collection and control system including:					
A. Estimated volumes	(264)(t)(9,8)	---	---	---	_____
B. Storage capacity		---	---	---	_____
C. Piping design		---	---	---	_____
D. Management of units		---	---	---	_____
3. Leachate detection, collection and treatment system details:					
A. Capacity	(264)(t)(11)	---	---	---	_____
B. Construction details	(264)(t)(10)	---	---	---	_____
C. Treatment capabilities	(264)(t)(12)	---	---	---	_____
4. Practices to control dispersal of hazardous waste by wind or water erosion	(264)(t)(19,20)	---	---	---	_____
5. Description of equipment and procedures used for waste pile movement	(264)(t)(2)	---	---	---	_____

WASTE PILES (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
6. If the pile is used for treatment, details of: A. The process and equipment used B. The nature and quality of the residues		---	---	---		
7. WPER (Waste Pile Evaluation and Repair) Plan	(264)(t)(25)	---	---	---		
8. For indoor waste piles only, a description of how the facility provides ground-water protection in lieu of the ground-water monitoring requirements of (264)(n).	(264)(t)(3)	---	---	---		
9. Special procedures for treating, storing, and handling potentially incompatible wastes	(264)(t)(38,39)	---	---	---		
10. Special procedures for treating, storing, and handling ignitable or reactive wastes	(264)(t)(37)	---	---	---		
11. Description of surface water management measures	(264)(t)(32)	---	---	---		
12. Surface water run-off collection and treatment facilities, including supporting calculations	(264)(t)(8) (84)(t)(26)	---	---	---		
13. Measures to prevent run-on	(264)(t)(13)	---	---	---		
14. Provision of 50' buffer zone between hazardous waste facility and property line	(264)(t)(31)	---	---	---		

WASTE PILES (Continued)

Facility Name _____
 ID Number _____

REQ JIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
15. Vector, Odor and Noise control (VONC) Plan	(264)(t)(40)	---	---	---	---	---
16. Access road dimensions and construction description	(264)(t)(30)	---	---	---	---	---
17. List of equipment and standby equipment used in operation of the facility	(264)(t)(41,42)	---	---	---	---	---
18. Description of unloading areas	(264)(t)(43)	---	---	---	---	---
19. Measures to control dust and waste tracking	(264)(t)(44,45)	---	---	---	---	---
20. For facilities receiving wastes from off-site, a description of the weighing or measuring facilities	(264)(t)(28)	---	---	---	---	---
21. Special closure requirements	(264)(t)(34,35)	---	---	---	---	---

LAND TREATMENT

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
1. A copy of plan that specifies:	264(u)(3)(i-iv)					
A. The wastes that were treated at the facility						
B. Design measure and operating practices necessary for proper treatment						
C. Run-on and run-off control and collection measures						
D. Unsaturated zone monitoring program						
E. Ground-water monitoring program						
2. Specify wastes constituents that shall be treated	264(u)(4)					
3. Specify the vertical and horizontal dimensions of the treatment zone	264(u)(5)					
4. A copy of the plan for demonstrating that waste constituents can be treated including:	264(u)(6,7,8)					
A. Field test						
B. Laboratory tests						
C. Available data						
D. Operating data (if available)						
E. Operating requirements						
F. Design requirements						
G. Area to be used for testing						
H. Application rates and number of applications						
I. Duration of demonstration						
J. Monitoring procedures						
K. Treatment zone dimensions and soil descriptions						
L. Closure requirements						
5. The method of pH control described	264(u)(9)(i)					

LAND TREATMENT (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
6. The method of application and application rates described	264(u)(9)(ii)	---	---	---	---	---
7. Methods to enhance microbial or chemical reactions described	264(u)(9)(iii)	---	---	---	---	---
8. Methods to control moisture content in soils described	264(u)(9)(iv)	---	---	---	---	---
9. Methods for incorporating waste into soil described	264(u)(9)(v)	---	---	---	---	---
10. On-site soils described according to USDA-SCS classification system	264(u)(9)(ix-xiii)	---	---	---	---	---
11. Map locating: A. Streams B. Public and private water supplies C. Bedrock outcrops D. Property lines E. Sink holes or closed depressions		---	---	---	---	---
12. Run-on and run-off control system design plans (25-year storm)	264(u)(10,13)	---	---	---	---	---
13. If food chain crops are to be grown, a copy of demonstration describing: A. How waste constituents will not be transferred to the food or feed portions of the crop or occur in greater concentrations than background levels B. Field tests C. Greenhouse studies	264(u)(18)(i-iv) and 264(u)(19)(i-ii)	---	---	---	---	---
		---	---	---	---	---
		---	---	---	---	---
		---	---	---	---	---

LAND TREATMENT (Continued)

Facility Name _____
 ID Number _____

PAGE NUMBER
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 APPLICATION

COMMENTS

PROVIDED Y/N
 ADEQUATE Y/N
 NOT APPLICABLE

REQUIREMENTS

SECTION

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
13. If food chain crops are to be grown, a copy of demonstration describing:						
D. Available data and data evaluation		---	---	---		
E. Operating data (if available)		---	---	---		
F. Soil characteristics		---	---	---		
G. Waste characteristics		---	---	---		
H. Laboratory tests		---	---	---		
I. Application rates and methods		---	---	---		
J. Crop management plan		---	---	---		
K. Operating plan		---	---	---		
L. Food chain crop characteristics		---	---	---		
M. Comparison crop characteristics		---	---	---		
14. Copy of crop management plan	264(u)(20)	---	---	---		
15. Copy of unsaturated zone monitoring plan that details:	264(u)(21)					
A. Constituents to be monitored and justification for their selection		---	---	---		
B. Soil core monitoring		---	---	---		
C. Soil pore liquid monitoring		---	---	---		
D. Background values for soils and soil pore liquid and procedures for establishing them		---	---	---		
E. Frequency and times for sampling soil and soil pore liquids including equipment and procedures utilized		---	---	---		
F. Statistical procedure for comparing monitoring		---	---	---		
G. Sample collection procedures		---	---	---		
H. Analytical procedures		---	---	---		
I. Procedures for selecting sampling locations		---	---	---		

LAND TREATMENT (Continued)

Facility Name _____
 ID Number _____

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER	COMMENTS
					IN APPLICATION	
16. A copy of closure plan that details during closure:	264(u)(24)					
A. Operational procedures necessary						
B. Run-on controls						
C. Run-off controls						
D. Wind dispersal controls						
E. Food-chain crop restriction						
F. Unsaturated zone monitoring						
G. Revegetation procedures						
17. A copy of post-closure plan that details during post-closure	264(u)(25)					
A. Operational procedures necessary						
B. Maintenance of vegetative cover						
C. Run-on control measures						
D. Run-off control measures						
E. Wind dispersal measures						
F. Food-chain crop restrictions						
G. Unsaturated zone monitoring measure						
H. Ground-water monitoring						
18. Property deed stipulation clause	(264)(u)(40)					
19. UZM (Unsaturated Zone Monitoring) Plan	(264)(u)(21,22)					
20. Sample operating record	(264)(u)(23)					
21. Special procedures for treating, storing, and handling potentially incompatible wastes	(264)(u)(29)					
22. Special procedures for treating, storing, and handling ignitable waste or reactive wastes	(264)(u)(28)					

LAND TREATMENT (Continued)

REQUIREMENTS	SECTION	PROVIDED	ADEQUATE	NOT APPLICABLE	Facility Name _____	COMMENTS
					ID Number _____	
					PAGE NUMBER IN APPLICATION	
23. Measures to prevent run-on	(264)(u)(10)	---	---	---		
24. Vector, Odor, and Noise Control (VONC) Plan	(264)(u)(9)(viii),(39)	---	---	---		
25. Access road dimensions and construction description	(264)(u)(36)	---	---	---		
26. List of equipment and standby equipment used in operation of the facility	(264)(u)(30,31)	---	---	---		
27. Description of unloading areas and practices	(264)(u)(32,33)	---	---	---		
28. Measures to control dust, wind dispersal of particulate matter, and waste tracking	(264)(u)(34,35)	---	---	---		
29. For facilities receiving wastes from off-site, a description of the weighing or measuring facilities	(264)(u)(37)	---	---	---		
30. Special closure and postclosure requirements	(264)(u)(17,18,24,25)	---	---	---		

LANDFILLS

Facility Name _____
 ID Number _____

PAGE NUMBER
 IN
 APPLICATION

COMMENTS

PROVIDED Y/N
 ADEQUATE Y/N
 NOT APPLICABLE

REQUIREMENTS

SECTION

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
1. Design drawings, specifications and referenced standards pertaining to the landfill, including:	(264)(v)(3)	---	---	---	---	---
A. Estimated life of the landfill	(264)(v)(3)(v,vi)	---	---	---	---	---
B. Final surface grades	(264)(v)(3)(vii,viii) and (4)(xviii)	---	---	---	---	---
C. Surface and run-off water management	(264)(v)(3)(ix)	---	---	---	---	---
D. Run-on water diversion	(264)(v)(3)(x,xi)	---	---	---	---	---
E. Daily and intermediate cover	(264)(v)(3)(xii)	---	---	---	---	---
F. Gas venting	(264)(v)(3)(xiii)	---	---	---	---	---
G. Anticipated static and dynamic loadings	(264)(v)(3)(xiv)	---	---	---	---	---
H. Liner system description, including	(264)(v)(3)(xiv)(A)	---	---	---	---	---
i. Subbase	(264)(v)(3)(xiv)(B)	---	---	---	---	---
ii. Liner materials, permeability, compatibility	(264)(v)(3)(xiv)(C),(xix)	---	---	---	---	---
iii. Bottom liner	(264)(v)(3)(xiv)(D)	---	---	---	---	---
iv. Leachate detection zone system	(264)(v)(3)(xiv)(E)	---	---	---	---	---
v. Top (primary) liner	(264)(v)(3)(xiv)(F)	---	---	---	---	---
vi. Protective cover zone/leachate collection zone	(264)(v)(3)(xv)	---	---	---	---	---
I. Cap	(264)(v)(3)(xvi)	---	---	---	---	---
J. Seasonal and ground water table provisions	(264)(v)(3)(xvii)	---	---	---	---	---
K. Perimeter markings	(264)(v)(3)(xviii)	---	---	---	---	---
L. Protection from existing landfill area leachate	(264)(v)(3)(xix)	---	---	---	---	---
M. Leachate collection, storage, and removal system	(264)(v)(3)(xx)	---	---	---	---	---
N. Leachate and/or runoff treatment system	(264)(v)(3)(xxi, xxiv, xxv)	---	---	---	---	---
O. Groundwater protection	(264)(v)(4)(viii)	---	---	---	---	---

LANDFILLS (Continued)

Facility Name _____
 ID Number _____

PAGE NUMBER
 IN
 APPLICATION

COMMENTS

PROVIDED Y/N
 ADEQUATE Y/N
 NOT APPLICABLE

REQUIREMENTS

SECTION

REQUIREMENTS	SECTION	PROVIDED Y/N	ADEQUATE Y/N	NOT APPLICABLE	PAGE NUMBER IN APPLICATION	COMMENTS
2. Description of general operating standards	(264)(v)(4)	---	---	---	---	---
A. Wind dispersal protection	(264)(v)(4)(i,xvi)	---	---	---	---	---
B. Incompatible waste provisions	(264)(v)(4)(ii)	---	---	---	---	---
C. Separation from municipal and liquid wastes	(264)(v)(4)(iv,v)	---	---	---	---	---
D. Layering	(264)(v)(4)(x)	---	---	---	---	---
E. Inspection	(264)(v)(4)(xix)	---	---	---	---	---
3. Provision of 50' buffer zone between hazardous waste facility and property line. No buildings or structures within 25' of disposal area	(264)(v)(3)(iv)	---	---	---	---	---
4. Vector, Odor, and Noise Control (VONC) Plan	(264)(v)(4)(vii)	---	---	---	---	---
5. Access road dimensions and construction description	(264)(v)(3)(i)	---	---	---	---	---
6. List of equipment and standby equipment used in operation of the facility	(264)(v)(4)(ix,xi)	---	---	---	---	---
7. Description of unloading areas	(264)(v)(4)(xii,xiii)	---	---	---	---	---
8. Measures to control dust and waste tracking	(264)(v)(4)(xv,xvii)	---	---	---	---	---
9. For facilities receiving wastes from off-site, a description of the weighing or measuring facilities	(264)(v)(3)(ii)	---	---	---	---	---
10. Special closure requirements	(264)(v)(3)(xxvi)	---	---	---	---	---

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF SOLID WASTE MANAGEMENT

HAZARDOUS WASTE PERMIT APPLICATION - PART A

GENERAL INFORMATION

NUMBER OF COPIES

Six (6) copies of the Part A permit application and all attachments must be submitted to the Department.

COMPLETION OF FORMS

Unless otherwise specified in instructions to the forms, each item must be answered. To indicate that each item has been considered, enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your facility or activity.

If you have previously submitted information to DER or to EPA which answers a question, you may either repeat the information in the space provided or attach a copy of the previous submission. Some items in the form require narrative explanation. If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information."

CONFIDENTIAL INFORMATION

All information submitted in this form will be subject to public disclosure, to the extent provided by Section 502(c) of Act 97, The Solid Waste Management Act of 1980. Persons filing this form may make claims of confidentiality. Such claims must be clearly indicated by marking "confidential" on the specific information on the form for which confidential treatment is requested or on any attachments, and must be accompanied, at the time of filing, by a written substantiation of the claim, by answering the following questions:

CONFIDENTIAL INFORMATION (continued)

- A. Which portions of the information do you claim are entitled to confidential treatment?
- B. For how long is confidential treatment desired for this information?
- C. What measures have you taken to guard against undesired disclosure of the information to others?
- D. To what extent has the information been disclosed to others, and what precautions have been taken in connection with that disclosure?
- E. Has EPA or any other Federal agency made a pertinent confidentiality determination? If so, include a copy of such determination or reference to it, if available.
- F. Will disclosure of the information be likely to result in substantial harmful effects to your competitive position? If so, what would those harmful effects be and why should they be viewed as substantial? Explain the causal relationship between disclosure and the harmful effects.

If no claim of confidentiality or no substantiation accompanies the information when it is submitted, DER may make the information available to the public without further notice to the applicant.

LINE BY LINE INSTRUCTIONS

SECTION I

Space is provided at the upper left hand corner of page 1 for insertion of your EPA Identification Number. If you have an existing facility, enter your Identification Number. If you don't know your EPA Identification Number, please contact EPA at 215-597-8751.

SECTION II

Enter the facility's official or legal name. Do not use a colloquial name.

SECTION III

Give the name, title, and work telephone number of a person who is thoroughly familiar with the facts reported in this application and who can be contacted by the person reviewing this application if necessary.

SECTION IV

Give the complete mailing address of the office where correspondence should be sent. This may or may not be the address used to designate the location of the facility.

SECTION V

Give the location of the facility identified in Section IV of this form. If the facility lacks a street name or route number, give the most accurate alternative geographic information (e.g., at intersection of Rts. 425 and 22). Include the name of municipality (e.g., township, boro, city, etc.) and the county.

SECTION VI

List, in descending order of significance, the four 4-digit standard industrial classification (SIC) codes which best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words. These classifications may differ from the SIC codes describing the operation generating the hazardous wastes.

SIC code numbers are descriptions which may be found in the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D.C. Use the current edition of the manual.

SECTION VII-A

Give the name, as it is legally referred to, of the person, firm, public organization, or any other entity which operates the facility described in this application. This may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation rather than the plant or site manager. Do not use a colloquial name.

SECTION VII-B

Indicate whether the entity which operates the facility also owns it by marking the appropriate box.

SECTION VII-C THRU F

Enter the telephone number and address of the operator identified in Section VII-A.

SECTION VII-H

Enter the appropriate letter to indicate the legal status of the operator of the facility. Indicate "public" for a facility solely owned by local government(s) such as a city, town, county, etc.

SECTION VIII

Give the number of each currently effective Federal or State permit issued to the facility for each program or, if you have previously filed an application but have not yet received a permit, give the number of the application, if any. Fill in the unshaded area only. If you have more than one currently effective permit for your facility under a particular permit program, you may list additional permit numbers on a separate sheet of paper.

SECTION IX

Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:

The legal boundaries of the facility;

The location and serial number of each of your existing and proposed intake and discharge structures;

All hazardous waste management facilities;

Each well where you inject fluids underground; and

All springs, surface water bodies, and any wells within 1/4 mile of the facility.

For an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, provide an additional map on which the structure, site, or well has been plotted.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude at the nearest whole second. On all maps of streams, show the direction of the current, and in tidal waters, show the directions of the ebb and flow tides. Use a 7-1/2 minute series map published by the U.S. Geological Survey, which may be obtained from:

Eastern Mapping Center
National Cartographic Information Center
U.S.G.S.
536 National Center
Reston, Va. 22092
Phone No. (703) 860-6336

SECTION X

Briefly describe the nature of your business (e.g., products produced or services provided).

SECTION XI-A

FIRST APPLICATION. If this is the first application that is being filed or the facility place an "X" in either the Existing Facility box or the New Facility box.

SECTION XI-B

REVISED APPLICATION. If this is a subsequent application that is being filed to amend data filed in a previous application, place an "X" in the appropriate box to indicate whether the facility has interim status or a permit.

NOTE: When submitting a revised application, applicants must resubmit their entirety each item on the application for which changes are requested. It is not necessary to resubmit information for other items that will not change.

SECTION XII

The information in Section XII describes all the processes that will be used to treat, store, or dispose of hazardous waste at the facility. The design capacity of each process must be provided as part of the description. The design capacity of injection wells and landfills at existing facilities would be measured as the remaining, unused capacity. See the form for the detailed instructions.

SECTION XIII

The information in Section XIII describes all the hazardous wastes that will be treated, stored, or disposed at the facility. In addition, the processes that will be used to treat, store, or dispose of each waste and the estimated annual quantity of each waste must be provided. See the form for the detailed instructions.

SECTION XIV

All existing facilities must include a drawing showing the general layout of the facility. This drawing must be approximately to scale and fit in the space provided on the form. This drawing must show the following:

The property boundaries of the facility;

The areas occupied by all storage, treatment, or disposal operations that will be used during interim status;

The name of each operation. (Example - multiple hearth incinerator, drum storage area, etc.);

Areas of past storage, treatment, or disposal operations;

Areas of future storage, treatment, or disposal operations; and

The approximate dimensions of the property boundaries and all storage, treatment, and disposal areas.

New facilities do not have to complete this item.

SECTION XV

All existing facilities must include photographs that clearly delineate all existing structures; all existing areas for storing, treating, or disposing of hazardous waste; and all known sites of future storage, treatment, or disposal operations. Photographs may be color or black and white, ground-level or aerial. Indicate the date the photograph was taken on the back of each photograph.

SECTION XVI

Enter the latitude and longitude of the facility in degrees, minutes, and seconds. For larger facilities, enter the latitude and longitude at the approximate mid-point of the facility.

SECTION XVII

See the form for the instructions to Section XVII.

SECTIONS XVIII AND XIX

All facility owners must sign Section XVIII. If the facility will be operated by someone other than the owner, then the operator must sign Section XIX. The certification must be signed as follows:

A. For a corporation, by a principal executive officer at least the level of vice president;

B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

C. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF SOLID WASTE MANAGEMENT

HAZARDOUS WASTE PERMIT APPLICATION - PART A

Please print or type in the unshaded areas only

I. EPA I.D. NUMBER											
[Grid for EPA I.D. Number]											
II. NAME OF FACILITY											
[Blank space for Facility Name]											
III. FACILITY CONTACT											
A. NAME & TITLE (last, first, & title)								B. PHONE (area code & no.)			
[Blank space for Name & Title]								[Blank space for Phone]			
IV. FACILITY MAILING ADDRESS											
A. STREET OR P.O. BOX											
[Blank space for Street or P.O. Box]											
B. CITY OR TOWN								C. State		D. Zip Code	
[Blank space for City or Town]								[Blank space for State]		[Blank space for Zip Code]	
V. FACILITY LOCATION											
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER								E. MUNICIPALITY			
[Blank space for Street, Route No. or Other Specific Identifier]								[Blank space for Municipality]			
B. CITY OR TOWN						C. State		D. Zip Code		F. COUNTY	
[Blank space for City or Town]						[Blank space for State]		[Blank space for Zip Code]		[Blank space for County]	
VI. SIC CODES (4-digit, in order of priority)											
A. FIRST				G. THIRD							
[Blank space for First SIC Code]				[Blank space for Third SIC Code]							
B. SECOND				D. FOURTH							
[Blank space for Second SIC Code]				[Blank space for Fourth SIC Code]							
VII. OPERATOR INFORMATION											
A. NAME										B. Is the name listed in Item VII-A also the owner?	
[Blank space for Name]										<input type="checkbox"/> YES <input type="checkbox"/> NO	
C. STREET OR P.O. BOX											
[Blank space for Street or P.O. Box]											
D. CITY OR TOWN						E. State		F. Zip Code		G. PHONE (area code & no.)	
[Blank space for City or Town]						[Blank space for State]		[Blank space for Zip Code]		[Blank space for Phone]	
H. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)											
F = FEDERAL		M = PUBLIC (other than federal or state)		[Blank space for Other]		[Blank space for Other]		[Blank space for Other]		[Blank space for Other]	
S = STATE		G = OTHER (specify)		[Blank space for Other]		[Blank space for Other]		[Blank space for Other]		[Blank space for Other]	
P = PRIVATE											
VIII. EXISTING ENVIRONMENTAL PROGRAM PERMITS											
A. NPDES (Discharges to Surface Water)				D. PSD (Air Emissions from Proposed Sources)							
[Blank space for NPDES]				[Blank space for PSD]							
B. UIC (Underground Injection of Fluids)				E. SOLID WASTE							
[Blank space for UIC]				[Blank space for Solid Waste]							
C. RCRA (Hazardous Wastes)				F. OTHER (specify)							
[Blank space for RCRA]				[Blank space for Other]							
IX. MAP											
<p>Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and any well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area as per the instructions.</p>											

US EPA ARCHIVE DOCUMENT

A. NATURE OF BUSINESS (provide a brief description)

XI. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Section I.

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

1. EXISTING FACILITY

2. NEW FACILITY (Complete item below.)

YR.	MO.	DAY

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo. & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

YR.	MO.	DAY

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo. & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

B. REVISED APPLICATION (place an "X" below and complete Section I)

1. FACILITY HAS INTERIM STATUS

2. FACILITY HAS A RCRA PERMIT

XII. PROCESSES -- CODES AND DESIGN CAPACITIES

A. PROCESS CODE -- Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item XII-C).

B. PROCESS DESIGN CAPACITY -- For each code entered in column A enter the capacity of the process.

1. AMOUNT -- Enter the amount.

2. UNIT OF MEASURE -- For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below may be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
STORAGE: Container (barrel, drum, etc.)	S01	Gallons or Liters	TREATMENT: Tank	T01	Gallons Per Day or Liters Per Day
Tank	S02	Gallons or Liters	Surface Impoundment	T02	Gallons Per Day or Liters Per Day
Waste Pile	S03	Cubic Yards or Cubic Meters	Incinerator	T03	Tons Per Hour or Metric Tons Per Hour; Gallons Per Hour or Liters Per Hour
Surface Impoundment	S04	Gallons or Liters	Other (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments, or incinerators. Describe the processes in the space provided (Item XII-C).)	T04	Gallons Per Day or Liters Per Day
DISPOSAL: Injection Well	D79	Gallons or Liters			
Landfill	D80	Acre-Feet (the volume that would cover one acre to a depth of one foot) or Hectare-Meter			
Land Application	D81	Acres or Hectares			
Ocean Disposal	D82	Gallons Per Day or Liters Per Day			
Surface Impoundment	D83	Gallons or Liters			

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	G	Liters Per Day	V	Acre-Feet	A
Liters	L	Tons Per Hour	D	Hectare-Meter	F
Cubic Yards	Y	Metric Tons Per Hour	W	Acres	B
Cubic Meters	C	Gallons Per Hour	E	Hectares	Q
Gallons Per Day	U	Liters Per Hour			

EXAMPLE FOR COMPLETING ITEM XII (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 600 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

	A. PROCESS CODE (from list above)			B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	A. PROCESS CODE (from list above)			B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
	1	2	3	1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)		1	2	3	1. AMOUNT	2. UNIT OF MEASURE (enter code)	
X-1	S	0	2	600	G							
X-2	T	0	3	20	E							
1												
2												
3												
4												

XII. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "TD4"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

XIII. DESCRIPTION OF HAZARDOUS WASTES

- A. **HAZARDOUS WASTE NUMBER** — Enter the four-digit number from 75.261(h) for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 75.261(h), enter the four-digit number(s) from 75.261(g) that describes the characteristics and/or the EP toxic contaminants of those hazardous wastes.
- B. **ESTIMATED ANNUAL QUANTITY** — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or EP toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. **UNIT OF MEASURE** — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE		CODE	METRIC UNIT OF MEASURE		CODE
POUNDS	.....	P	KILOGRAMS	.....	K
TONS	.....	T	METRIC TONS	.....	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Section XII to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or EP toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Section XII to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess the characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: {1} Enter the first three as described above; {2} Enter "000" in the extreme right box of Item XII-D(1); and {3} Enter in the space provided on page 5, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one Hazardous Waste Number shall be described on the form as follows:

1. Select one of the Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING SECTION XIII (Shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of leaded tank bottoms from the petroleum refining industry. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. HAZARD. WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES																
	1. PROCESS CODES (enter)						2. PROCESS DESCRIPTION (if a code is not entered in D(1))																
X-1	K	0	5	2	900	P	T	0	3	D	8	0											
X-2	D	0	0	2	400	P	T	0	3	D	8	0											
X-3	D	0	0	1	100	P	T	0	3	D	8	0											
X-4	D	0	0	2																			"included with above"

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

XIII. DESCRIPTION OF HAZARDOUS WASTES (continued)												
EPCRA 2002	A. Hazard Waste No. (enter code)			B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES						
						1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												

XIII. DESCRIPTION OF HAZARDOUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM Q(1) ON PAGE 4.

XIV. FACILITY DRAWING

All existing facilities must include in the space provided on page 6 a scale drawing of the facility (see instructions for more detail).

XV. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures, existing storage, treatment, and disposal areas, and sites of future storage, treatment, or disposal areas (see instructions for more detail).

XVI. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

XVII. FACILITY OWNER

- A. If the facility owner is also the facility operator as listed in Section VII, place an "X" in the box to the left and skip to Section XVIII below.
- B. If the facility owner is not the facility operator as listed in Section VII, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

XVIII. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

XIX. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

Commonwealth of Pennsylvania
 Department of Environmental Resources
 Bureau of Solid Waste Management

Date Prepared: _____ I.D. Number: _____

GENERAL ENVIRONMENTAL, SOCIAL AND ECONOMIC INFORMATION

MODULE NO. 9

Prepared by: _____

This module is to be completed and submitted with applications for the following:

1) Municipal Waste Landfills including:

- a) new landfills;
- b) an expansion, enlargement or alteration of the facility beyond the original design capacity or beyond the area specified in the permit obtained from the Department;
- c) existing landfills where the permit is to be revised, modified or re-issued to reflect the application of technology which is significantly different than that previously permitted by the Department.

2) Municipal waste (Class V) incinerators.

- 3) Residual waste landfills and expansions thereof.
- 4) Non-captive hazardous waste treatment and disposal facilities.
- 5) Captive hazardous waste treatment and disposal facilities which are not located at the facility where the waste is generated.
- 6) Other individual permit applications at the discretion of the Bureau of Solid Waste Management when a particular project appears to have a significant effect on environmental values.

NOTE: Construction and demolition waste landfills, agricultural utilization of sewage sludge, commercial waste incinerators and hospital incinerators are not included.

The purpose of this module is to obtain information to assist the Department in evaluating the potential impact of a proposed project on the natural, scenic, historic and aesthetic values of the environment, in accordance with Article I, Section 27 of the Pennsylvania Constitution. A positive response to a particular question will not necessarily indicate significant environmental harm nor result in the denial of a permit. The actual determination of whether the potential for significant environmental harm exists will be made by the Department after consultation with the applicant and other concerned governmental agencies. If the Department determines that there may be a significant impact on natural, scenic, historic or aesthetic values of the environment, the Department will consult with the applicant to examine ways to reduce the environmental harm to a minimum. If, after consideration of mitigation measures, the Department finds that significant environmental harm will occur, the Department will evaluate the public social and economic benefits of the project to determine whether the harm outweighs the benefits.

Part A must be completed by all applicants. Part B should be completed by applicants who determine that the potential for significant environmental harm exists. The Department may request more detailed information on environmental, social, and economic impacts, if necessary.

- A. The following questions request information concerning the potential impact of the proposed facility on natural, scenic, historic, and aesthetic values of the environment. Circle the appropriate answer. Map requested information on a U.S.G.S. 7.5 minute topographic quadrangle map where possible. Use additional paper to provide written responses.

1. Is the project located in the corridor of a stream or river designated as a national or state wild, scenic, recreational, or modified recreational river in accordance with the National Wild and Scenic Rivers Act of 1968, or the Pennsylvania Scenic Rivers Act?

Yes No

If yes,

- a) Identify the river, the outline of the designated corridor, and the location of the project within the corridor.
- b) Describe how the project conforms to the Land Management Guidelines and Studies or Plans for the corridor.

2. Is the project located within one mile of the nearest bank of a stream or river listed as a 1-A priority for study by the Pennsylvania Department of Environmental Resources as a state wild, scenic, recreational, or modified recreational river; or mandated by the U.S. Congress for study or determined by the U.S. Heritage Conservation and Recreation Service to meet the criteria for study for potential inclusion into the National Wild and Scenic Rivers System?

Yes No

If yes,

- a) Identify the river or stream and its distance from the project.
- b) Conduct visual and traffic analyses as specified in the applicant guidelines.
- c) Describe the characteristics of the project which might create adverse environmental, visual, or traffic impacts on or in the vicinity of the river or stream.
- d) Describe measures to be taken to minimize adverse impacts on the river or stream.

3. Is the project located within one mile of a unit of the National Parks System; a state, county, or municipal park; a recreation facility operated by the U.S. Army Corps of Engineers; a state forest picnic area; or the Allegheny River Reservoir in the Allegheny National Forest?

Yes No

If yes,

- a) Identify the park or other area and its distance from the project.
- b) Conduct visual and traffic analyses as specified in the applicant guidelines.
- c) Describe the characteristics of the project which might create adverse environmental, visual, or traffic impacts on the park or other area.
- d) Describe measures to be taken to minimize adverse impacts on the park or other area.

4. Is the project located within one mile of the footpath of the Appalachian Trail?

Yes No

If yes,

- a) Indicate the distance from the project to the Appalachian Trail.
- b) Conduct visual and traffic analyses as specified in the applicant guidelines.
- c) Describe the characteristics of the project which might create adverse environmental, visual, or traffic impacts on the Appalachian Trail.
- d) Describe measures to be taken to minimize adverse impacts on the Appalachian Trail.

5. Is the project located within one mile of a national natural landmark designated by the U.S. National Park Service; or a natural area or wild area designated by the Pennsylvania Environmental Quality Board?

Yes No

If yes,

- a) Identify the natural landmark, natural area, or wild area and its distance from the project.
- b) Conduct visual and traffic analyses as specified in the applicant guidelines.
- c) Describe the characteristics of the project which might create adverse environmental, visual, or traffic impacts on the natural landmark, natural area, or wild area.
- d) Describe measures to be taken to minimize adverse impacts on the natural landmark, natural area, or wild area.

6. Is the project located within one mile or within an identified potential impact area of a national wildlife refuge, national fish hatchery, or national environmental center operated by the U.S. Fish and Wildlife Service?

Yes No

If yes,

- a) Identify the wildlife refuge, fish hatchery, or environmental center and its distance from the project.
- b) Conduct visual and traffic analyses as specified in the applicant guidelines.
- c) Describe the characteristics of the project which might create adverse environmental, visual, or traffic impacts on the wildlife refuge, fish hatchery, or environmental center.
- d) Describe measures to be taken to minimize adverse impacts on the wildlife refuge, fish hatchery, or environmental center.

7. Is the project located within one mile of an historic property owned by the Pennsylvania Historical and Museum Commission?

Yes No

If yes,

- a) Identify the historic property and its distance from the project.
- b) Conduct visual and traffic analyses as specified in the applicant guidelines.
- c) Describe the characteristics of the project which might create adverse environmental, visual, or traffic impacts on the historic property.
- d) Describe measures to be taken to minimize adverse impacts on the historic property.

8. Is the project located within ¼ mile of an historic site listed in the National Register of Historic Places or the Pennsylvania Inventory of Historic Places; or an archaeological site listed in the Pennsylvania Archaeological Site Survey?

Yes No

If yes,

- a) Identify the historic or archaeological site, and its distance from the project.
- b) Describe the characteristics of the project which might create adverse impacts on the historic or archaeological site.
- c) Describe measures to be taken to minimize adverse impacts on the historic or archaeological site.
- d) Indicate any contact you have had with the Pennsylvania Historical and Museum Commission about the project.

9. Is the project within ¼ mile of the boundary of a state forest or state game land; or the proclamation boundary of the Allegheny National Forest?

Yes No

If yes,

- a) Identify the forest or game land and its distance from the project.
- b) Describe the characteristics of the project which might create adverse impacts on the forest or game land.
- c) Describe measures to be taken to minimize adverse impacts of the project on the forest or game land.

10. Is the project located within an area which is a habitat of a rare, threatened, or endangered species of plant or animal protected by the Federal Endangered Species Act of 1973, or recognized by the Pennsylvania Fish Commission or Pennsylvania Game Commission?

Yes No

If yes,

- a) Identify the species and the habitat area and the location of the project within the area.
- b) Describe the characteristics of the project which might create adverse impacts on the species or habitat.
- c) Describe measures to be taken to minimize adverse impacts on the species or habitat.
- d) Describe any contact you have had with the Pennsylvania Fish Commission, Pennsylvania Game Commission, Pennsylvania Historical & Museum Commission, or U.S. Fish and Wildlife Service about the project.

11. Is the project located on prime farmland (Class I and II soils) as indicated in the U.S. Soil Conservation Service County Soil Survey?

Yes No

If yes, identify the location and acreage of prime farmland and the location of the project.

12. Is the project located within a wetland?

Yes No

If yes,

- a) Identify the location and size of the wetland and the location of the project.
- b) Is a permit required for the project, for filling or dredging the wetland, under Section 404 of the Federal Clean Water Act?
- c) Describe any contact you have had with the U.S. Army Corps of Engineers or the U.S. Fish and Wildlife Service about the project.
- d) Is a permit required for the project for a dam or waterway obstruction in the wetland, under Chapter 105 of the Rules and Regulations of Pennsylvania Department of Environmental Resources?

13. Is the project located within a Special Protection Watershed, as designated in Chapter 93 of the Rules and Regulations of the Pennsylvania Department of Environmental Resources?

Yes No

If yes,

- a) Identify the stream and watershed, and the distance of the stream from the project.
- b) Describe the characteristics of the project which might create adverse impacts on the stream.
- c) Describe measures to be taken to minimize adverse impacts on the stream.

14. Is the project located within the watershed or aquifer, and within one mile of a public water supply facility dependent on groundwater sources; or upstream, within the watershed, and within three miles of a public water supply facility dependent on surface sources?

Yes No

If yes,

- a) Identify the public water supply facility, and its supply source; locate both on a topographic map; and indicate their distances from the project.
- b) Briefly describe the public water supply facility, including capacity and population served.
- c) Describe measures to be taken to protect the public water supply facility from any potential harm.

15. Is the project located within a 100-year floodplain as indicated on a Flood Boundary and Floodway Map contained in a flood insurance study prepared by the Federal Insurance Administration, or as determined by some other method if a Flood Boundary and Floodway Map is not available?

Yes No

If yes,

- a) Is the project located in the floodway, based on available detailed studies?
- b) Is a permit required for the project under Chapter 105 of the Rules and Regulations of the Pennsylvania Department of Environmental Resources?
- c) Describe any contacts you have had with the Bureau of Dams and Waterway Management about the project.
- d) Is a permit required by the local municipality under the Floodplain Management Act?
- e) Describe any contact you had had with the municipality about the project.

16. Will the project, absent control measures, result in an increase in the peak discharge rate for stormwater drainage from the project site?

Yes No

If yes,

- a) Describe the amount of increase in the peak discharge rate for stormwater drainage.
- b) Describe adverse impacts that might result from the increase in peak discharge rate for stormwater drainage.
- c) Describe measures to be taken to minimize adverse impacts from the increase in the peak discharge rate for stormwater drainage.

If no, provide documentation supporting this judgment.

17. Is the project located in a landslide, sinkhole, or mine-subsidence prone area?

Yes No

If yes,

- a) Identify the geologic hazard and the location of the project.
- b) Indicate how the geologic hazard will affect the project.
- c) Describe engineering and design measures to be taken to minimize the geologic hazard to the project and prevent an increase in danger from the hazard to other property owners in the vicinity.

18. Will the project create an increase in traffic on the approach route(s) leading to the project?

Yes No

If yes,

- a) Identify the approach route(s) to the project site, and describe them in terms of :
 - 1) design capacities, roadway width and condition;
 - 2) average daily traffic counts (if available from Pennsylvania Department of Transportation);
 - 3) hazardous grades or curves.
- b) Describe the expected traffic increase; include number, type, size and weight of vehicles and distribution on approach routes.
- c) Identify and indicate number of residences fronting (50 feet setback or less) on approach route(s) to the project site.
- d) Identify any schools, hospitals, or nursing homes located on the approach route(s) to the project site.
- e) Describe any special routing or timing of traffic to the project site to be provided to minimize conflict with other traffic or to prevent safety hazards. Traffic impacts analyzed for previous questions should be briefly mentioned.

19. If the project is a solid waste disposal facility disposing of putrescible wastes,

a) Is it located within 10,000 feet of a public use airport runway used by turbo jet aircraft?

Yes No

b) Is it within 5,000 feet of a public use airport runway used by only piston-type aircraft?

Yes No

If yes, identify the airport and its distance from the project.

B. If the Department finds that the project will cause unavoidable significant environmental harm, the Department will then determine whether the harm outweighs the public social and economic benefits of the project. The following questions request information regarding social and economic benefits.

1. Indicate the counties and/or municipalities which will comprise the service area of the project*, and the estimated proportion of the total volume and type of solid wastes which will come from each.

2. Describe how wastes will be transported from their source to the project (include mode & handling enroute).

3. Is the project consistent with local, county or regional solid waste plans, if such plans exist? Indicate which plans have been consulted and explain why the project is or is not consistent with each.
4. What factors indicate the need for the project in the identified service area? Cite local plans, if applicable; present and future expected solid waste volumes and their sources within the service area; adequacy of existing facilities to meet present and future needs, etc.
5. If the project will handle industrial wastes, indicate the types of industries which need disposal services, number of establishments to be served, general locations of establishments, employment in these establishments, and their economic importance. Describe why these wastes are not presently being handled adequately. What will be the impact on industries if a disposal facility is not available?
6. Describe factors (such as location, transportation, geology, etc.) which make the proposed project site well-suited to serve the needs described above. Compare the proposed site with other potential sites which have been considered, or which may be available within, or reasonably close to, the service area.
7. What revenues will be generated by the project for local jurisdictions (counties, local governments, school districts, etc.) in the form of fees, taxes, royalties, etc.? List type, amount and frequency of payment (yearly, monthly, one-time, etc.).
8. How many people will be employed directly in operating the project and what are their occupations? What will the estimated yearly payroll (in present dollars) be for the project.
9. Include any additional relevant information which would indicate the public social and economic benefits to be provided by the project.

**Service area is that area or areas in which wastes handled at the project will be generated.*

February 1985

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF SOLID WASTE MANAGEMENT**

ADDENDUM TO MODULE NO. 9

General Environmental, Social and Economic Information

Question number twelve of Module No. 9, Form ER-SWM-66:82 is modified to read as follows:

12. Is the project, including any incidental earthmoving or construction activities, located in or within 300 feet of a wetland.

DATE PREPARED

IDENTIFICATION NO.

**COMPLIANCE HISTORY
MODULE NO. 10**

COMPLETION OF THIS MODULE IS REQUIRED AS A
PART OF THE APPLICATION FOR ANY TYPE OF SOLID WASTE
MANAGEMENT PERMIT OR LICENSE

ATTACH ADDITIONAL SHEETS AS NECESSARY TO ANSWER THE FOLLOWING:**A. Purpose and Applicability:**

1. The purpose of this application module is to assess the applicant's history of compliance with laws, regulations and standards relating to environmental protection in conformance with Sections 503(c) and (d) of the Pennsylvania Solid Waste Management Act. Failure to provide valid information required may result in the denial, suspension or revocation of your permit [license] as well as the imposition of civil and criminal sanctions.
2. Completion of this module is required in order for the Department to process and review the application and/or permit [license] pursuant to the Solid Waste Management Act.
3. This module may also be required as part of a facility [transporter's] annual report, when a permit is to be amended, revised or otherwise modified, or when the Department determines such information is necessary to properly monitor a permit [license].
4. Unless otherwise noted herein, this module applies to compliance history in regard to the following statutes and regulations promulgated thereunder.
 - a. Pennsylvania Solid Waste Management Act of July 31, 1968, (P.L. 788, No. 241).
 - b. Pennsylvania Solid Waste Management Act of July 7, 1980. (P.L. 380, No.97).
 - c. Clean Streams Law of June 22, 1937, (P.L. 1987, No. 394).
 - d. The Air Pollution Control Act of January 8, 1960 (1959 P.L. 2119, No. 787).
 - e. The Surface Mining Conservation and Reclamation Act of May 31, 1945 (P.L. 1198, No. 418).
 - f. Dam Safety and Encroachments Act of November 26, 1978 (P.L. 1375, No. 325).
 - g. Other State and Federal statutes relating to environmental protection, air or water quality, solid waste management or surface mining.
5. If the Applicant is a corporation, this module shall be signed by two corporate officers authorized to execute this module, or by one corporate officer and one corporate employee in Pennsylvania with sufficient authority over the solid waste management activity being licensed or permitted to be authorized to execute this module. A corporate seal shall be affixed; however, if no seal is required by the state of incorporation of the applicant, the applicant should so state and no seal will be required.

B. Applicant Background:

The following questions are to be completed by the applicant:

1. State the legal name and address of the applicant.

2. Identify all of the applicant's places of business and terminals where municipal or residual waste processing or disposal or hazardous waste generation (with the exception of small quantity generators), transportation, storage, treatment or disposal facilities or activities are conducted in Pennsylvania.

3. Identify the form of management under which the applicant conducts its business in Pennsylvania (check appropriate box):

- Individual
- Municipality
- Proprietorship
- Corporation

- Partnership
- Limited Partnership
- Government Agency
- Other (identify the nature of the business relationship)

4. Complete the following where applicable:
 - a. If the applicant is a corporation (as indicated in Question B. 3 above), list names and addresses of all principals of the corporation. This shall include the following: corporate officers, members of the board of directors, and principal stockholders who own, hold, or control stock of five percent (5%) or more of a publicly held corporation or ten percent (10%) or more of a privately held corporation. List the social security number* of all individuals identified, and the IRS tax identification number and/or employer identification number of corporations and other business entities.

* Supplying individual social security numbers is optional; failure to provide all applicable numbers, however, will make processing of the application more difficult.

5. List all Pennsylvania DER permits or licenses, issued pursuant to the statutes listed in item A(4) (a-e) above, that the applicant, including all persons and organizations identified in this Section B, currently has in effect or has had in effect in the past ten year. (Include type of permit or license, number and location, date issued, expiration date, if any.)

6. Identify any solid waste processing or disposal facility, area or activity in Pennsylvania since 1970 or hazardous waste storage, treatment, transportation, or disposal facility, area, or activity in Pennsylvania since 1980 which the applicant, or any person or entity identified anywhere in Section B, currently owns or operates, or previously owned or operated, but which is not listed under any of the above responses to this Module. This shall include any solid waste management activities which are no longer permitted or which were never under permit. Include the locations(s) of all such facilities, areas, or activities, the type of operation, and identify any state or federal permits pursuant to which they operate or have operated.

C. Compliance Background:

1. Identify any "Notice of Violation" sent to the applicant or those persons or entities identified anywhere in response to Section B over the past five year period from Pennsylvania DER. Include the date of the "Notice of Violation", the location of the alleged violation, the nature of the alleged violation and the disposition. (Attach copies or make available upon request.)

5. Identify any consent order, consent adjudication, consent decree or settlement agreement in Pennsylvania entered into since January 1, 1970 by the applicant, or those persons or entities identified anywhere in Section B, to which either a county health department, the Pennsylvania DER, or the U.S. Environmental Protection Agency was a party and which concerned any facility or activity in Pennsylvania regarding an environmental protection statute or ordinance.

6. For all facilities and activities identified in response to Question B.6 above, indicate whether such facility or activity was the subject of an administrative order, consent agreement, consent adjudication, consent order, settlement agreement, court order, consent decree, civil penalties, bond forfeiture proceedings, consent decree, conviction, or permit or license suspension or revocation pursuant to the statutes listed in Section A(4). If any of these facilities or activities were subject to any of the actions identified herein, include the date of the action, the location of the violation, the nature of the violation, and disposition. (Attach copies or make available upon request.)

7. Where the applicant is a corporation, list all principals who have also been principals of other corporations which have committed past violations of Act 97.

8. Compliance Outside of Pennsylvania
 - a. [Note: For corporate applicants which are publicly traded, are diversified and have done business in Pennsylvania long enough to provide an in-state basis for evaluating compliance history, Item 8 may be answered through the submission of SEC 10K reports for the past five years, a current proxy statement, and any corporate statements or directives which articulate the corporation's policy with regard to compliance with environmental laws in general or solid waste management laws in particular. Any applicant which wishes to make such submission in response to Item 8 questions should ask for further instructions from the Pennsylvania DER office to which the permit or license application is being submitted.]
 - a. Identify any misdemeanor or felony convictions of, or pleas of guilty or *nolo contendere* by, persons or entities listed anywhere in Section B for violations of any state or federal statutes for activities outside of Pennsylvania relating to environmental protection within the past five years. Include convictions and pleas for any acts involving the storage, treatment, transportation, processing or disposal of solid waste. (Describe the date of the convictions and offenses, the location of the offenses, and the nature of the offenses.)

b. Identify any final administrative orders issued to those persons or entities identified anywhere in Section B within the past five years pursuant to any state or federal statutes for activities outside of Pennsylvania relating to environmental protection. (Describe the date of the order(s), the location of the violation(s), and the nature of the violation(s).) (Attach copies or make available upon request.)

c. Identify any court order, court decree, consent decree, consent adjudication, consent order, final civil penalty adjudication, final action on bond forfeiture, or settlement agreement in the past five years between those persons or entities identified anywhere in Section B and any state or federal agencies responsible for environmental protection. (Describe the date of the order, decree, etc., the location of the violation(s), and the nature of the violation(s).) (Attach copies or make available upon request.)

I (we) hereby certify that I(we) have the authority to respond to the above questions on behalf of the applicant, and that the information provided herein is true and correct to the best of my(our)knowledge, information and belief.

(Signature)

Name: _____

Title: _____

Social Security No.: _____

Sworn to and subscribed before me this

_____ day of _____,

19____.

Notary Public

(Signature)

Name: _____

Title: _____

Social Security No.: _____

Sworn to and subscribed before me this

_____ day of _____,

19____.

Notary Public

Affix Corporate Seal:

(For Corporations, see instructions in A(5) regarding seal and signatures.)

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL RESOURCES
 BUREAU OF SOLID WASTE MANAGEMENT
 DIVISION OF HAZARDOUS WASTE MANAGEMENT

APPLICATION NO. (Department Use Only)

CONTRACTUAL CONSENT OF LANDOWNER

(I)(We), the undersigned, hereinafter sometimes referred to as "landowner", being the owner(s) of

_____ acres of land located in _____
(TOWNSHIP, BOROUGH, OR CITY)

_____ County, Pennsylvania, as described in the deed(s) recorded in the Recorder of Deeds Office at Deed Book(s) and page(s) _____ and shown by crosshatched

lines on the map attached hereto which is signed in the original by the landowner upon which

_____ proposes to engage in hazardous waste
(HAZARDOUS WASTE MANAGEMENT FACILITY OPERATOR)

storage, treatment or disposal activities for which application for permit will be made to the Department of Environmental Resources under the Pennsylvania Solid Waste Management Act, Act of July 7, 1980

(P.L.380,35 P.S.56018.10 *et seq.*, and of which application this consent will be made a part, DO HEREBY

ACKNOWLEDGE THAT THE HAZARDOUS WASTE MANAGEMENT FACILITY OPERATOR AND HIS PERSONNEL HAVE

THE RIGHT TO ENTER UPON AND USE THE LAND FOR THE PURPOSES OF CONDUCTING HAZARDOUS WASTE

MANAGEMENT ACTIVITIES. Furthermore, (I)(We), the undersigned, do hereby irrevocably grant to the hazard-

ous waste management facility operator and to the Commonwealth of Pennsylvania or any of its author-

ized agents, or employees, the right to enter upon the aforesaid land before the beginning of the hazardous

waste management activities, during the hazardous waste management activities and for a period of 20 years

after final closure of the facility, for the purposes of inspection and for the purpose of conducting such pollu-

tion abatement or pollution prevention activities required under the Act, the regulations promulgated thereunder

and the terms of the permit as the Department deems necessary. (I)(We) do hereby grant in addition to the

Commonwealth, for the aforesaid period of time, a right of entry across any adjoining or contiguous lands

owned by (us)(me) in order to have access to the land described herein. It is specifically agreed and understood

that this contractual consent gives the Commonwealth the right to enter, inspect the premises, and abate

or prevent pollution as a matter within the police power but does not obligate the Commonwealth to do so,

does not constitute any ownership interest by the Commonwealth in the aforesaid land, and does not affect

or limit any rights available to the Commonwealth under applicable law.

US EPA ARCHIVE DOCUMENT

THE LANDOWNER _____ TO ALLOW THE ABOVE-NAMED HAZARDOUS WASTE
(AGREES OR DOES NOT AGREE)
MANAGEMENT FACILITY OPERATOR TO TRANSFER OR ASSIGN, BY WRITTEN AGREEMENT, THIS CON-
TRACTUAL CONSENT TO ANOTHER HAZARDOUS WASTE MANAGEMENT FACILITY OPERATOR.

This Consent shall terminate and become null and void if the hazardous waste management facility operator does not apply to the Department of Environmental Resources for a permit to conduct hazardous waste management activities on the aforesaid land within _____ year(s) from the date of this Consent. Nothing in this Consent shall preclude or limit the landowner's authority to terminate the right or privilege of the hazardous waste management facility operator to conduct hazardous waste management activities on the aforesaid land.

This Contractual Consent shall be deemed to be a recordable document. Prior to the initiation of hazardous waste management facility operations under the permit, this Consent shall be recorded by _____ and entered into the deed book (d.b.v.) index at
(LANDOWNER OR HAZARDOUS WASTE MANAGEMENT FACILITY OPERATOR)
the office of the recorder of deeds in the county(ies) in which the hazardous waste management facility is to be located.

In witness whereof and intending to legally bind (myself) (ourselves), (my) (our) heirs, successors and assigns, (I) (we) have hereunto set (my) (our) hand(s) and seal this _____ day of _____, 19 ____.

(SEAL)

LANDOWNER (Print Name)

By: _____
Signature

(Print Name)

By: _____
Signature

(Print Name)

ACKNOWLEDGEMENT OF INDIVIDUALS OR PARTNERS

STATE OF :
: SS
COUNTY OF :

On (DATE), before me, the undersigned Notary, personally appeared (NAME(S)) known to me (or satisfactorily proven) to be the person whose name is subscribed to this instrument, and who acknowledged that (HE, SHE OR THEY) executed the same and desires it to be recorded.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

(SEAL) NOTARY PUBLIC My Commission Expires: (DATE)

ACKNOWLEDGEMENT OF CORPORATIONS

STATE OF :
: SS
COUNTY OF :

On (DATE), before me, the undersigned Notary, personally appeared (NAME(S)) of (TITLE OF PERSON) (NAME OF CORPORATION), a corporation, and that s(he), as such officer, being authorized to do so, executed the foregoing instrument on behalf of the said corporation and desires that this instrument be recorded.

IN WITNESS WHEREOF, I have hereunder set my hand and official seal.

(SEAL) NOTARY PUBLIC My Commission Expires: (DATE)

This instrument has been recorded in County, Pennsylvania, this day of , at Book , Page(s) .

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Resources

Guidelines for the Development and Implementation
of Preparedness, Prevention, and Contingency (PPC) Plans

Bureau of Solid Waste Management
Bureau of Water Quality Management
P. O. Box 2063
Harrisburg, PA 17120
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INTRODUCTION

A wide variety of industrial activities, both manufacturing and commercial, exist in Pennsylvania. Many of these activities have the potential for causing environmental degradation or endangerment of public health and safety through accidental releases of toxic, hazardous, or other polluttional materials.

In recognition of this fact, several State and Federal regulatory programs have been developed to encourage the use of preventive approaches to deal with unwarranted releases of toxic, hazardous, or other polluttional materials to the the environment.

Table 1 lists these programs and defines the statutory and regulatory basis for each. A more detailed summary of each program is shown in Table 2 which illustrates the similarities among them. A review of the regulations and guidelines pertaining to each program more clearly illustrates these similarities. The main differences between the programs are the types of industrial activities and the nature of the polluting materials addressed.

The Department's objective is to consolidate the similarities of the State and Federal pollution incident prevention and emergency response programs into one overall program. Industrial and commercial installations which have the potential for causing accidental pollution of air, land or water, or the endangerment of public health and safety are required to develop and implement *Preparedness, Prevention, and Contingency (PPC) Plans* which encompass the PIP, SPCC, BMP, and PPC/Contingency Planning program requirements.

TABLE I — STATE AND FEDERAL POLLUTION INCIDENT PREVENTION AND EMERGENCY RESPONSE PROGRAMS

Program	Implemented by	State and Federal Laws Which Apply	State and Federal Implementing Regulations	Effective Date of Regulations
Pollution Incident Prevention (PIP)	Pa. DER as part of its Water Quality Management Program	Pa. Clean Streams Law	25 Pa. Code, Ch. 101	1971
Spill Prevention Control and Countermeasure (SPCC) ¹ (For "hazardous substances" as defined under Section 311 of the Clean Water Act)	Pa. DER and U.S.EPA as part of the NPDES program	Pa. Clean Streams Law Fed'l Clean Water Act	25 Pa. Code, Ch. 101 40 CFR 151	1971 proposed 9/1/78
Best Management Practices (BMP)	Pa. DER and U.S.EPA as part of the NPDES program	Pa. Clean Streams Law Fed'l Clean Water Act	25 Pa. Code, Ch. 101 40 CFR 125, Subpart K	1971 5/19/80
Preparedness, Prevention, and Contingency (PPC), or Contingency Planning	Pa. DER and U.S.EPA as part of the RCRA program	Pa. Solid Waste Management Act Fed'l Resources Conservation and Recovery Act	25 Pa. Code Ch. 75 40 CFR 264, Subparts C and D, and 40 CFR 265, Subparts C and D	11/19/80 11/19/80

(1) EPA has also promulgated SPCC regulations (40 CFR 112, 12/11/73) which establish requirements for preventing spills of oil into navigable waters of the U.S. by non-transportation related onshore and offshore facilities. These regulations are implemented and enforced by EPA only. As discussed in Section I of this guidance document, an oil-related SPCC plan developed to comply with EPA's regulations should be considered as *one part* of a facility's overall PPC Plan.

**TABLE 2 — COMPARISON OF STATE AND FEDERAL POLLUTION
INCIDENT PREVENTION AND EMERGENCY RESPONSE PROGRAMS**

Aspect	Pollution Incident Prevention (PIP)	Spill Prevention, Control, and Countermeasure (SPCC)	Best Management Practices (BMP)	Preparedness, Prevention, and Contingency (PPC), or Contingency Planning
Purpose	Prevention/control of accidental discharge of polluting materials to surface or groundwater	Prevention of accidental discharges of hazardous substances to surface waters	Prevention of accidental discharge of toxic and hazardous materials to surface waters	To minimize and abate hazards to human health and the environment from fires, explosions, or release of hazardous wastes to air, soil, or surface water
Types of Industrial Activities Affected	All industrial activities having potential for accidental pollution	Non-transportation related activities subject to the NPDES program, with potential for discharge of hazardous substances	Industrial activities subject to the NPDES program where significant amounts of toxic or hazardous pollutants are involved	Activities which generate, store, treat, transport, or dispose of hazardous wastes
Activities Covered?	Transportation, storage, processing or raw materials, intermediates, products, fuels, wastes	Production, storage, processing, refining, handling, transferring, distributing hazardous wastes	Use, manufacture, storage, handling of toxic and hazardous materials	Generation, storage, transport, treatment, disposal, of hazardous wastes
What Polluting Materials are Addressed?	All polluting materials	"Hazardous Substances" defined pursuant to Sec. 311 of the Clean Water Act	"Toxic" materials defined pursuant to Sec. 307 and "Hazardous Substances defined pursuant to Sec. 311 of the Clean Water Act	"Hazardous Wastes" as defined under Ch. 75 of DER's regulations
Hazards Addressed	Container leaks, ruptures, spills, floods, power failures, mechanical failure, human error, strikes, vandalism, etc.	Same as PIP	Same as PIP	Same as PIP, plus fires and explosions
Plan Includes	Study of past incidents, training, preventive maintenance, house-keeping, security, backup equipment, internal, external communicator, spill containment, drainage controls, inspections	Same as PIP	Same as PIP	Same as PIP plus additional local notification, emergency coordination, and evacuation requirements
Amendments to Plan Required for Significance Facility or Operational Changes?	Yes	Yes	Yes	Yes
Emergency Incident Report Required?	Yes	Yes	Yes	Yes

I. PROCEDURES FOR DEVELOPMENT AND REVIEW OF PPC PLANS

A. *Who Must Develop PPC Plans?*

In general, any manufacturing or commercial installation which has the potential for causing accidental pollution of air, land, or water, or for causing endangerment of public health and safety through accidental release of toxic, hazardous, or other polluting materials must develop, maintain, and implement a PPC Plan.

Manufacturing or commercial waste water dischargers, which are required to obtain NPDES permits, must develop PPC plans in order to satisfy the requirements of Chapter 101 of the Department's Rules and Regulations. In addition to NPDES discharges there are a variety of other non-NPDES manufacturing or commercial installations which may be directed by the Department to develop PPC plans on a case by case basis.

Manufacturing or commercial installations which generate hazardous waste, or which involve treatment, storage, or disposal of hazardous waste must develop PPC plans in conformance with Chapter 75 of the Department's regulations. (Note: hazardous waste transporters must also develop PPC plans under Chapter 75. A separate PPC guidance document has been developed for transporters.)

B. *How Do Existing Emergency Response Plans Fit in With PPC Planning?*

It should be noted that many manufacturing or commercial installations may have already developed a Pollution Incident Prevention (PIP) plan which should encompass most of the PPC considerations. In such cases the PIP plan may only need a slight amount of updating.

It should further be noted that oil-related Spill Prevention, Control, and Counter-measure (SPCC) plans, which are or have been developed pursuant to EPA's oil-related SPCC regulations, should also be considered as part of an installation's overall PPC plan. Some installations may elect to integrate their oil-related SPCC plan with the PPC plan elements, or may elect to keep it as a separate chapter, or appendix, to the PPC plan.

Other types of existing emergency response plans should be handled in a similar manner.

C. *Development and Submission of PPC Plans for Review and Approval.*

The PPC Plan must be developed in accordance with good engineering practice by someone who is familiar with the day-to-day operations at the site. If an outside consultant is employed for this purpose, he must be authorized to conduct a thorough study of the material storage, handling, usage, and waste management practices conducted at the installation.

Section II below outlines the general content and format of PPC plans.

In general PPC plans should be submitted for review and approval by the Department in conjunction with applications for Water Quality Management or Hazardous Waste Management permits, as follows:

1. NPDES dischargers should submit (2) copies of the PPC plan for review along with the NPDES application materials. If a PIP plan has previously been approved for the installation by the Bureau of Water Quality Management, the PIP should be updated to the extent considered necessary to conform with the PPC guidelines.

Facilities which are not required to obtain NPDES permits, but which must obtain Water Quality Management Part II permits, should submit (2) copies of the PPC plan for review along with the Part II permit application.

Other facilities which are not normally required to obtain NPDES or WQM Part II permits may also be required to develop and submit PPC Plan, should conditions warrant, pursuant to Chapter 101 of the Department's regulations.

2. Hazardous waste *generators* are required to develop PPC plans* and to maintain them on site. They are required to submit PPC plans to the Department for review and approval upon request by the Department.
3. Hazardous waste *treatment, storage, or disposal* facilities should submit one copy of the PPC plan* for *each* copy of the Hazardous Waste Part B permit application being submitted. In these situations the PPC plan is considered as part of the overall Hazardous Waste Part B permit application. Final PPC plan approval will accompany the issuance of a Hazardous Waste Management permit.

*Note: PPC plans developed by hazardous waste generators and/or treatment/storage/or disposal facilities, which would not otherwise be required to obtain NPDES or Water Quality Management Part II permits, generally need only to address the PPC planning requirements as they pertain to generation, treatment, storage or disposal of hazardous wastes (unless otherwise directed by the Department).

D. *Distribution of the PPC Plan*

A copy of the PPC Plan and any subsequent revisions must be maintained on-site. All members of the installation's organization for developing, implementing, and maintaining the PPC Plan and all emergency coordinators must review the Plan and be thoroughly familiar with provisions.

In addition to the site copy, additional copies of the PPC plan should be made available to local fire, police, medical services, and other local emergency management agencies which may become involved in an actual emergency (see Description of PPC Plan Elements, Part U).

E. *Implementation of the PPC Plan*

The provisions of the PPC Plan must be carried out whenever emergency situations arise which endanger public health and safety, or the environment.

F. *Revisions to the PPC Plan*

The PPC Plan must be periodically reviewed and updated, if necessary. As a minimum, this must occur when:

1. Applicable Department regulations are revised;
2. The Plan fails in an emergency;
3. The installation changes in its design, construction, operation, maintenance, or other circumstances, in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
4. The list of emergency coordinators changes;
5. The list of emergency equipment changes; or
6. As otherwise required by the Department.

II. PPC PLAN CONTENT AND FORMAT

General Instructions

1. Table 3 outlines the basic elements of a PPC Plan. Each of these elements is further described below. Certain PPC Plan elements may not be entirely applicable or appropriate for a specific manufacturing or commercial installation. In these cases the person preparing the PPC Plan should act accordingly and should provide a brief explanation as to why the Plan element(s) in question is not applicable or inappropriate.
2. The most important thing to remember in developing a PPC Plan is that the actual effectiveness of the Plan will depend upon its simplicity and readability.

PPC plans which are composed of several volumes of overly detailed narrative discussions and specifications tend to discourage the reader or user. Diagrams, charts, tables, maps, and plans must be easily readable and understandable, particularly in times of an actual emergency.

The Plan should additionally be indexed or tabbed in such away that the key portions which pertain to emergency response can be quickly referred to.

TABLE 3 — ELEMENTS AND FORMAT OF A PPC PLAN

- A. General description of the industrial or commercial activity
- B. Description of existing emergency response plans
- C. Organizational structure for implementation of the PPC Plan
- D. Material and waste inventory
- E. Spill and leak prevention and response
- F. Material compatibility
- G. Inspection and monitoring program
- H. Preventive maintenance
- I. Housekeeping program
- J. Security
- K. External factors
- L. Internal and external communications and alarm systems
- M. Employee training program
- N. List of emergency coordinators
- O. Duties and responsibilities of the emergency coordinator
- P. Chain of command
- Q. List of agencies to be notified
- R. Emergency equipment
- S. Evacuation plan for installation personnel*
- T. Arrangements with emergency response contractors*
- U. Agreements with local emergency response agencies and hospitals*
- V. Pollution incident history
- W. Implementation schedule

* These elements pertain primarily to installations which store, treat, or dispose of "hazardous waste," although they may also apply to installation handling or using other types of toxic or hazardous materials in quantities which pose a public health risk in times of fire, explosions, or other emergencies.

DESCRIPTION OF PPC PLAN ELEMENTS

A. *General Description of the Industrial or Commercial Activity*

- Briefly describe the nature of the industrial or commercial activity which occurs at the site. Include a general discussion of products manufactured, manufacturing processes used, wastes generated, etc.
- On an 8½" x 11" portion of a 7½-minute USGS map show the following:
 - North indicating arrow
 - name of the 7½ minute USGS quadrangle
 - location of the site and site boundaries
 - location of surface drainage courses leading away from the site, and major surface streams and tributaries near the site
 - location of any known public and private groundwater supplies in the vicinity of the site, and
 - location of any known public and private surface water intakes downstream from the site.
- Include drawings (suggested size no larger than 36" x 50") which show the following:
 - general layout of the site
 - property boundaries
 - areas occupied by manufacturing or commercial activities
 - raw materials and product storage
 - loading and unloading operations
 - waste handling, storage, and treatment facilities
 - drains, pipes, and channels which lead away from potential leak or spill areas
 - outfall pipes which discharge to surface streams or drainage channels
 - secure and open-access areas
 - entrance and exit routes to the site

B. *Description of Existing Emergency Response Plan(s)*

- Briefly describe any existing plan which has been previously developed by the installation for the purpose of pollution incident prevention or emergency response preparedness. If the plan has previously been approved by the Department, this should also be noted, along with the date of approval.
- Provide a brief discussion as to how the existing plan relates to the overall PPC Plan being developed. The degree to which the existing plan encompasses some, or all, of the PPC Plan elements should also be noted.

As an example, existing Pollution Incident Prevention (PIP) Plans, which were previously developed to meet the Department's Water Quality Management program requirements may only need to be slightly modified or updated to satisfy the general PPC Plan requirements. A simple description which cross-references

the PIP Plan with the various PPC Plan elements will generally suffice in lieu of a detailed rewrite to conform with the suggested PPC Plan format.

Similar plans which have been prepared for agencies other than DER should also be described and cross-referenced to the maximum extent possible to the PPC Plan elements so as to minimize rewriting. For example, an oil-related Spill Prevention Control and Countermeasure (SPCC) Plan which has been developed to comply with EPA's regulations 40 CFR 112, may be treated as an appendix, or as a separate chapter, to the overall PPC Plan for an installation.

C. *Organizational Structure for Implementation of the PPC Plan*

- Describe the organizational structure for implementation of the PPC Plan.
- Describe the duties and responsibilities of the individuals within the PPC organization.

Each installation must develop a permanent organizational structure for developing, implementing, and maintaining the PPC Plan. The exact nature and make-up of this structure will vary considerably, depending upon the size and complexity of the installation.

For example, a large manufacturing company may either establish a formal PPC committee, or it may assign this responsibility to an existing organization within the company, such as a safety committee or a preventive maintenance group. A small manufacturing or commercial facility may only have one or two individuals responsible for developing and implementing the PPC Plan. However, the PPC organization, regardless of its size, must be given both the responsibility and authority by management for developing, implementing, and maintaining the PPC Plan.

The main duties and responsibilities of the PPC organizational structure should include identification of materials and wastes handled (materials inventory), identification of potential spill sources (risk assessment), establishment of spill-reporting procedures, visual inspection programs, review of past incidents and spills, and countermeasures utilized. In addition, the PPC organizational structure should be responsible for coordination needed to implement the goals of the PPC Plan, coordination of the activities for spill cleanup, notification of authorities, and establishment of training and educational programs for installation personnel.

The PPC organizational structure should have the overall responsibility for periodically reviewing and evaluating the PPC Plan, and instituting appropriate changes at regular intervals. The organizational structure should also be responsible for the review of new construction and process changes at an installation relative to the PPC Plan. The organizational structure should also evaluate the effectiveness of the overall PPC Plan and make recommendations to management on related matters.

D. *Material and Waste Inventory*

- Identify and list by common chemical name and trade name, the locations, sources and quantities or raw chemical materials, commercial chemical products, manufacturing chemical intermediates, and process wastes managed at the installation which have the potential for causing environmental degradation or endangerment of public health and safety through accidental releases. Requests for confidentiality of this information will be handled in accordance with Department regulations.

Detailed descriptions must be available for materials that have a high potential for spills, discharges, explosions, or fires (such as those stored in bulk storage). Materials that have a low potential for spills, discharges, explosions, or fires (such as those used and stored in small quantities in a laboratory) should be minimally detailed.

This information should be used to evaluate the prevention, containment, mitigation, cleanup, and disposal measures which would be used in the event of a spill, discharge, explosion, or fire. As new materials are added to the list their pollution potential should be evaluated.

- For each of the above listed materials, physical, chemical toxicological, health, and safety information based on available literature (e.g. technical bulletins, safety data sheets, scientific literature) shall be available for use in an emergency. Cite these references in the plan and their location.

E. *Spill and Leak Prevention and Response*

- Describe the sources and areas where potential spills and leaks may occur, the direction of flow of spilled materials, and the pollution incident prevention measures (see Appendix I) specific to the source or area.
- Provide separate drawings, plot plans (or include in the general layout drawings), showing sources and quantities of materials and wastes, sources and areas where potential spills may occur, and pollution incident prevention measures (see Appendix I).

The PPC Plan should include a prediction of the direction of the flow of materials spilled as a result of equipment failure, accident, or human error. Particular care and attention should be paid to evaluating the following: raw materials storage, in-plant transfer, process and materials handling, intermediary and product storage (if applicable), truck and rail car loading and unloading, and waste handling and storage.

Liquid storage areas must have containment capacity sufficient to hold the volume of the largest single container or tank, plus a reasonable allowance for precipitation based on local weather conditions and plant operations. Containment systems must be sufficiently impervious to contain spilled material or waste until it can be removed or treated. Tank or container materials must be compatible with the material or waste stored.

Pollution incident prevention practices to eliminate contaminated runoff, leaching, or windblowing must be implemented in non-liquid storage areas. Provisions must be made to contain or manage contaminated run-off or leachate from these areas.

Piping, processing, and materials handling equipment at in-plant transfer, process, and materials handling areas must be designed and operated so as to prevent spills. Containment practices should be instituted at processing and handling areas including floor drains, storm sewers, or drainage swales to prevent an accidental discharge. Protection such as covers or shields to prevent windblowing, spraying, and releases from pressure relief valves from causing a discharge should be provided as appropriate.

Truck and rail car loading and unloading areas must have sufficient containment capacity to hold the volume of the largest tank truck or rail car loaded or unloaded at the installation, plus a reasonable allowance for precipitation. Containment systems must be sufficiently impervious to contain spilled material or waste until it can be removed or treated.

F. *Material Compatibility*

- Summarize the engineering practices followed with regard to material compatibility such as materials of construction, corrosion, etc.

Engineering practices with regard to material compatibility normally consist of an appraisal of the compatibility of construction materials of tanks, pipelines, etc., with their contents; the reaction of materials or wastes when intentionally or inadvertently mixed or combined; and, the compatibility of a container such as a storage tank or pipeline with its environment.

Specific consideration should be given to the procedures and practices delineating the mixing of materials and prohibiting mixing of incompatible materials which may result in fire, explosion, or unusual corrosion. Thorough cleaning of storage vessels and equipment before reuse should be standard practice to ensure that there is no residual incompatible with the next or later materials used. Coatings or cathodic protection should be considered for protecting buried pipelines or storage tanks from corrosion.

G. *Inspection and Monitoring Program*

- Describe the type and frequency of inspections and monitoring for leaks or other conditions that could lead to spills or emergency situations.

Typical inspections include the following: pipes, pumps, valves, and fittings for leaks; tanks for corrosion; tanks supports and foundations for deterioration; chemical material piles for windblowing; evidence of spilled materials along drainage ditches; effectiveness of housekeeping practices; damage to shipping containers; leaks, seeps, or overflows at waste treatment, storage, or disposal sites; etc. Areas that should be inspected include the following: storage, loading and unloading, transfer pipelines, waste treatment facilities, and disposal sites.

Routine monitoring should be performed to determine the physical conditions and liquid levels in tanks, the quality of plant site run-off in diked areas, etc., either by manual testing or in situ instrumentation. Monitoring should be used to initiate a warning of the need for immediate corrective action to prevent a spill or other emergency condition. Monitoring systems should be used in conjunction with a communications or alarm system to immediately notify personnel of abnormal conditions.

An inventory system should also be considered for keeping track of those materials having the greatest potential for causing problems due to leaks, spills, or mishandling.

As a minimum, the frequency of inspection and monitoring must be in accordance with the applicable Department regulations and permits. Appendix I includes some additional inspection and monitoring examples.

H. *Preventive Maintenance*

- Describe the aspects of the preventive maintenance program for equipment and systems relating to conditions that could cause environmental degradation or endangerment of public health and safety.
- Describe the procedures for the correction of those conditions by adjustment, repair, or replacement before the equipment or system fails.

A good preventive maintenance program includes the following: (1) identification of equipment and systems to which the program should apply; (2) periodic inspections of identified equipment and systems; (3) periodic testing of equipment and systems, (such as routine calibration of environmental monitoring equipment); (4) appropriate adjustment, repair, or replacement of parts; and (5) complete recordkeeping of the applicable equipment and systems.

I. *Housekeeping Program*

- Identify the areas and the type of housekeeping practices that should apply to reduce the possibility of accidental spills and safety hazards to plant personnel.

Examples of good housekeeping include the following: neat and orderly storage of chemicals; prompt removal of small spillage; regular refuse pickup and disposal; maintenance of dry, clean floors by use of brooms, vacuum cleaners, or cleaning machines; and, provisions for the storage of containers or drums to keep them from protruding into open walkways, pathways, or roads.

Dry chemicals should be swept or cleaned up to prevent possible washdown to drains and drainage ditches or windblowing of the material to other areas of the plant. Small liquid accumulations on the ground or on a floor in a building should be cleaned up to prevent discharge or transport to other areas. See Appendix I for additional examples.

J. **Security**

- Describe the security procedures employed at the installation to prevent accidental or intentional entry that could result in a violation of Departmental regulations, or injury to persons or livestock.

Security systems described in the PPC Plan should address, as necessary: fencing; lighting; vehicular traffic control; access control; visitors' passes; locked entrances; locks on drain valves and television monitoring. Security procedures must be in accordance with applicable Department regulations.

K. **External Factors**

- Describe the possible effects of power outages, strikes, floods, snowstorms, etc., and the action to be taken to alleviate any resulting effects to public health and safety or the environment.

L. **Internal and External Communications or Alarm Systems**

- Describe the internal communications or alarm used to provide immediate emergency instruction (voice or signal) to installation personnel.
- Describe the external communications or alarm system used to summon emergency assistance from local police or fire departments.

Examples of communications or alarms systems are: hand-held two-way radios; CB radios; telephones; fire or police alarms; PA systems; beeper or voice pagers; etc. This requirement must be in accordance with applicable Department regulations.

M. **Employee Training Program**

- Summarize the training program given to employees which will enable them to understand the processes and materials with which they are working, the safety and health hazards, the practices for preventing, and the procedures for responding properly and rapidly to spills.

At a minimum, the training program must be designed to ensure that personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment systems including, where applicable: procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment; key parameters for automatic cut-off systems; communications and alarms systems; response to fires and explosions; site evacuation procedures; and, shut-down of operations.

In addition, the employee training program should address other aspects of the PPC program, such as preventive maintenance, inspection and monitoring, housekeeping practices, etc. The training program must be designed and conducted in accordance with applicable Department regulations.

N. **List of Emergency Coordinators**

- Provide an up-to-date list of names, and addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator. Where more than one is listed, one must be named as the primary coordinator and others shall be listed in the order in which they will assume responsibility as alternates.

At all times, there must be at least one employee either on the installation's premises or on-call with the responsibility for coordinating all emergency response measures. The emergency coordinator must be thoroughly familiar with all aspects of the Preparedness, Prevention, and Contingency Plan, all operations and activities, the location and characteristics of all materials handled, the location of all records, and the lay-out of the installation. In addition this individual should have the authority to commit the resources necessary to carry out the PPC Plan.

O. Duties and Responsibilities of the Emergency Coordinator

- Describe the duties and responsibilities of the emergency coordinator specific to your installation or activity in the event of an imminent or actual emergency.

During an emergency, the emergency coordinator should activate alarm systems, notify emergency response agencies, identify the problem, assess the health or environmental hazards, and take all reasonable measures to stabilize the situation. The emergency coordinator should also be responsible for follow-up activities after the incident such as treating, storing, or disposing of residues and contaminated soil, decontamination and maintenance of emergency equipment, and submission of any reports. Appendix II describes some example duties and responsibilities of the emergency coordinator.

P. Chain of Command

- Provide an internal list, by position, of key employees that must be contacted in the event of an emergency or spill.

List the positions, office telephone extensions, and home phone numbers (if applicable) of key employees, in the order of responsibility, that would be contacted in the event of an emergency or spill.

This list, along with the notification procedure, should be posted on bulletin boards or other conspicuous locations around the installation.

Q. List of Agencies to be Notified

- Provide a list of agencies and phone numbers that must be contacted in the event of an emergency or spill.

A list must be developed for notifying State, local, and Federal regulatory agencies of all spills. Such a list should include, as applicable: PA DER; PA Emergency Management Agency; County Health Department; PA Fish Commission; the National Response Center (U.S. EPA and U.S. Coast Guard); local police and fire departments; the local sewage treatment plant (for discharges to sewer system); and downstream public water supplies, industrial water users, and recreation areas.

R. Emergency Equipment

- Provide an up-to-date list of available emergency equipment. The list must include the location, a physical description, and a brief description of the intended use and capabilities of each item on the list.
- Describe the procedures for maintenance and decontamination of emergency equipment.

All installations should have equipment available to allow personnel to respond safely and quickly to emergency situations. Some examples of emergency equipment are portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, decontamination equipment, self-contained breathing apparatus, gas masks, and emergency tool and patching kits. See Appendix III for more examples.

All equipment must be tested and maintained as necessary to assure its proper operation in time of emergency. After an emergency, all equipment must be decontaminated, cleaned, and fit for its intended use before normal operations resume.

S. Evacuation Plan for Installation Personnel

- Describe the evacuation plan for installation personnel where there is a possibility that evacuation could be necessary.

The PPC Plan must describe signals to be used to begin evacuation, primary evacuation route, and alternate evacuation routes (in cases where primary routes could be blocked by releases of hazardous materials, wastes, gases, or fires). Periodic drills should be conducted to evaluate the effectiveness of the plan.

T. ***Arrangements with Emergency Response Contractors***

- Provide a list of emergency response contractors, phone numbers, and the services they will provide.

The services of nearby contractors should be investigated and arrangements made for the prompt performance of contractual services on short notice. Equipment suppliers should be contacted to determine the availability and means of delivery of equipment needed for removing pollution or hazards to the public health and safety.

U. ***Arrangements with Local Emergency Response Agencies and Hospitals***

- Provide a list of local emergency response agencies, and hospitals. Include the phone numbers and describe arrangements concerning the emergency services they will provide.

Arrangements must be made, as appropriate, to inform a local emergency response agencies, and hospitals concerning the type of materials or wastes handled at the installation and the potential need for services. Arrangements should be made which will designate who will be the primary emergency response agency and who will provide support services during emergencies.

Efforts should be made to familiarize police, fire departments, emergency response teams, and the County Emergency Management Coordinator with the layout of the installation, the properties and dangers associated with the hazardous materials handled, places where personnel would normally be working, entrances to roads inside the facility, and the possible evacuation routes. As minimum, this requirement must be in accordance with applicable Department regulations.

V. ***Pollution Incident History.***

- List the previous pollution incidents, the date, the material or waste spilled, approximate amount spilled, environmental damage, and action taken to prevent a recurrence.

An important criteria in determining the effectiveness of the PPC Plan program is the history of incidents at the installation. A history of no incidents suggest that the practices and procedures at the site are effective. For a site with a history of incidents it is important to investigate the reasons for the spills and the response of the company in minimizing the potential for their recurrence.

W. ***Implementaion Schedule***

- Provide a list of any missing or incomplete aspects of the PPC Plan and a time schedule when they will be implemented.

An implementation schedule of any elements of the PPC Plan not currently in place must be developed. Each missing or incomplete aspect of the plan should be addressed and discussed within the applicable elements of the plan. Missing or incomplete aspects must be implemented as soon as possible and in conformance with all Department regulations and requirements.

APPENDIX I

POLLUTION INCIDENT PREVENTION PRACTICES

Pollution incident prevention practices can be divided into the following four categories: prevention, containment, mitigation and ultimate disposition. The listings below provide specific examples of each category.

1. **PREVENTION**

Visual Observations of:

- Storage facilities
- Transfer pipelines
- Loading and unloading areas
- Waste handling and storage areas

Detailed Inspections of:

- Pipes, pumps, valves, and fittings for leaks
- Tanks for corrosion (internal and external)
- Dry material or waste stockpiles for windblowing
- Tanks supports or foundations for deterioration
- Walls for stains
- Drainage ditches and areas around old tanks for evidence of spilled materials
- Primary or secondary containment for deterioration
- Housekeeping practices
- Shipping containers for damage
- Material or waste conveyance systems for leaks, spills, or overflows
- Integrity of stormwater collection systems
- Waste storage, treatment, or disposal sites for leaks, seeps, and overflows

Monitoring

- Liquid-level detectors
- Alarm systems
- Pressure and temperature gauges
- Analytical testing instrumentation
- Pressure drop shut-off devices
- Flow meters
- Valve positioning indicators
- Equipment operational lights
- Excess-flow valves
- Automatic runoff diversion devices
- Routine sample collection
- Redundant instrumentation

Nondestructive Testing

- Hydrostatic pressure tests
- Acoustical emission tests
- Records of tank wall thicknesses

Labeling

- U.S. DOT or National Fire Protection Association's (NFPA) designation on tanks and pipelines
- Color coding of tanks and pipelines
- Warning signs

Vehicle Positioning

- Physical barriers (e.g., wheel chocks)
- Underlying drains
- Designated loading and unloading areas

Covering

- Tarpaulins over outdoor dry waste or material stockpiles
- Buildings or roofs over outside processes or stockpiles
- Vegetation, rock, or synthetic covering on surface impoundments

Pneumatic and Vacuum Conveying

- Loading and unloading by air pressure or vacuum
- Safety relief valves
- Dust collectors
- Air slide trucks and rail cars

Preventive Maintenance

- Identification of equipment and systems
- Periodic inspections
- Periodic testing
- Appropriate adjustment, repair, or replacement of parts
- Complete recordkeeping

Good Housekeeping

- Neat and orderly storage of chemicals
- Prompt removal of small spillage
- Regular garbage pickup and disposal
- Maintenance of dry, clean floors by use of brooms, vacuum cleaners, etc.
- Maintenance of proper spacing for pathways and walkways between containers and drums
- Stimulation of employee interest in good housekeeping

Employee Training Programs

Materials Inventory Systems

2. **CONTAINMENT**

Secondary Containment

- Dikes
- Curbs
- Depressed areas
- Storage basins
- Sumps
- Drip pans
- Liners
- Double piping
- Sewer collection systems

Flow Diversion

- Trenches
- Drains
- Graded pavement
- Grating
- Overflow structures
- Sewers
- Culverts

Vapor Control

- Water spray
- Vapor space
- Vacuum exhaust

Dust Control

- Hoods
- Cyclone collectors
- Bag-type collectors
- Filters
- Negative-pressure systems
- Water spraying

Sealing

- Foamed plastic compounds used for plugging leaks in tanks

3. **MITIGATION**

Physical Clean-up

- Brooms
- Shovels
- Plows

Mechanical Clean-up

- Vacuum systems
- Pumps
- Pump/bag system

Chemical Clean-up

Sorbents

- activated carbon
- polyurethane and polyolefin spheres, beads, and foam belts
- amorphous silicate glass foam
- clay
- sawdust

Gelling agents

polyelectrolytes
polyacrylamide
butylstyrene copolymers
polyacrylonitrile
polyethylene oxide

Foams

rockwood alcohol
protein
fluoroprotein
aqueous film-forming foam
polar liquid foam
surfactant-based foam

Volatilization

distillation
stripping
evaporation

Carbon absorption
Coagulation/precipitation
Neutralization
Ion exchange
Chemical oxidation
Biological treatment

4. **ULTIMATE DISPOSITION**

Thermal oxidation
Land disposal
Recycle
Recover
Reuse
Detoxification

APPENDIX II

EXAMPLES OF AN EMERGENCY COORDINATOR'S DUTIES AND RESPONSIBILITIES

Whenever there is an imminent or actual emergency situation, the emergency coordinator must *immediately*:

1. Activate facility alarms or communications systems, where applicable, to notify facility personnel; and
2. Notify local emergency response agencies including the Department.

Whenever there is an emission or discharge, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of emitted or discharged materials. He may do this by observation or review of records and, if necessary, by chemical analysis.

Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the emission or discharge, fire, or explosion. This assessment must consider both direct and indirect effects of the emission, discharge, fire, or explosion.

If the emergency coordinator must assess possible hazards to human health or the environment that may result from the emission or discharge, fire, or explosion. This assessment must consider both direct and indirect effects of the emission, discharge, fire, or explosion.

If the emergency coordinator determines that the installation has had an emission, discharge, fire, or explosion which would threaten human health or the environment, he must *immediately* notify the applicable local authorities and indicate if evacuation of local areas may be advisable; and, *immediately* notify the Department by telephone at 717-787-4343 and the National Response Center at 800-424-8802 and report the following:

1. Name of the person reporting the incident
2. Name and location of the installation
3. Phone number where the person reporting the spill can be reached
4. Date, time, and location of the incident
5. A brief description of the incident, nature of the materials or wastes involved, extent of any injuries, and possible hazards to human health or the environment
6. The estimated quantity of the materials or wastes spilled, and
7. The extent of contamination of land, water, or air, if known.

During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fire, explosion, emission, or discharge do not occur, reoccur, or spread to other materials or wastes at the installation. These measures shall include, where applicable, stopping manufacturing processes and operations, collecting and containing released materials or wastes, and removing or isolating containers.

If the installation stops operations in response to a fire, explosion, emission, or discharge, the emergency coordinator must ensure that adequate monitoring is conducted for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

Immediately after an emergency, the emergency coordinator with Departmental approval must provide for treating, storing, or disposing of residues, contaminated soil, etc., from an emission, discharge, fire, or explosion at the installation.

The emergency coordinator must insure, that in the affected areas of the installation, no material or waste incompatible with the emitted or discharged residues is processed, stored, treated, or disposed of until cleanup procedures are completed; and, all emergency equipment listed in the PPC Plan is cleaned and fit for its intended use before operations are resumed.

Within 15 days after the incident, the installation must submit a written report on the incident to the Department. The report must include the following:

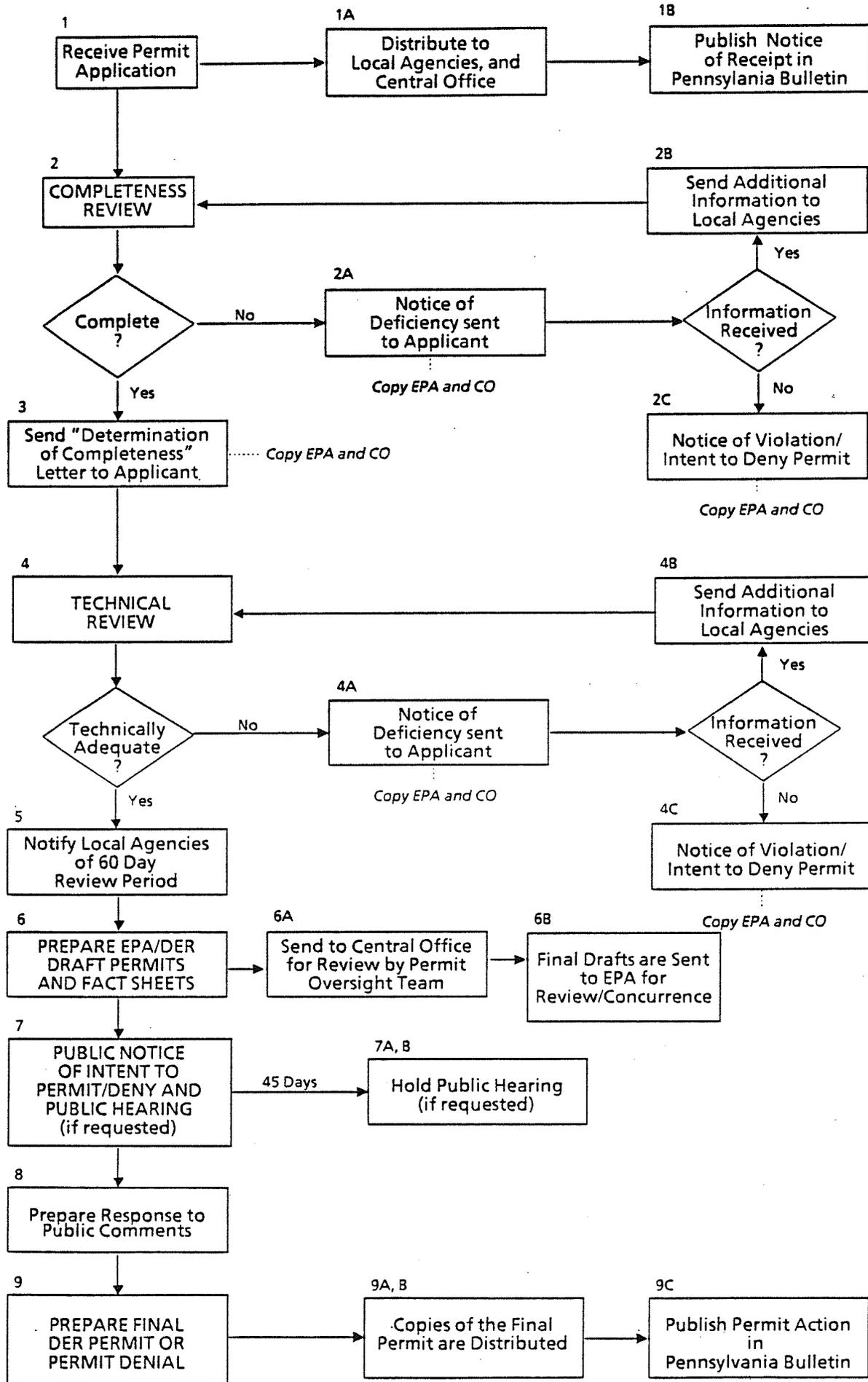
1. Name, address, and telephone number of the individual filing the report
2. Name, address, and telephone of the installation
3. Date, time, and location of the incident
4. A brief description of the circumstances causing the incident
5. Description and estimated quantity by weight or volume of materials or wastes involved
6. An assessment of any contamination of land, water, or air that has occurred due to the incident
7. Estimated quantity and disposition of recovered materials or wastes that resulted from the incident, and
8. A description of what actions the installation intends to take to prevent a similar occurrence in the future.

APPENDIX III

EXAMPLES OF EMERGENCY EQUIPMENT

Special equipment is often required and may be needed quickly in an emergency. Examples include the following:

Aerial ladder	Fuel Supply
Absorbant materials	Geiger counter
Accident investigation kit	Generator trailer
Air compressor	Heaters, portable
Air supply, for breathing equipment	Helicopter
Backhoe	Hydraulic spreader jacks
Basket stretchers	Inhalator
Bulldozer	Jack hammer
Bullhorn	Jacks
Camera/photo equipment	Ladder Truck
Cellar pump	Lighting equipment, portable
Chain hoist	Medical supplies
Chain saw	Metal saw (power)
Chemical neutralizers	Public address system
Crane	Radio
Cutters (power)	Resuscitator
Decontamination equipment with a clean water supply (70-80°F).	Sand supply
Ejector - smoke	Self-contained breathing apparatus (SCBA)
Elevated platform truck	Self-contained underwater breathing apparatus (SCUBA)
Explosimeters	Submersible pump
Fans	Tank truck
Firefighting equipment	Tool box
First aid supplies	Welding/cutting equipment
Foam concentrate supply	Water pump
Foam generators	
Forklift	



6-13-85

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

PERMIT

FOR HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL

Permittee: _____ Permit Number: _____

Facility: _____

This permit is issued by the Commonwealth of Pennsylvania Department of Environmental Resources (DER) under authority of the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. Section 6018.101 et seq. (the Act) and DER hazardous waste regulations to _____ (hereafter called the Permittee), to operate a hazardous waste management facility located in _____, at latitude _____ ° ' " North and longitude _____ ° ' " West.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Parts I - _____, consisting of pages 1 through ___ and Attachments 1 through __) and the applicable regulations contained in 25 Pa. Code Chapter 75 as specified in the permit.

US EPA ARCHIVE DOCUMENT

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated _____ as modified by subsequent amendments dated _____

_____ (hereafter referred to as the application) is accurate and that the facility will be constructed and/or operated as specified in the application. Any inaccuracies found in this information may be grounds for the revocation or modification of this permit [see 25 Pa. Code §§75.278, 75.279, and 75.280] and potential enforcement action. The Permittee must inform DER of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is conditioned upon full compliance with all applicable provisions of the Act; DER regulations contained in 25 Pa. Code Chapter 75; the Clean Streams Law, 35 P.S. §691.1 et seq.; the Air Pollution Control Act, 35 P.S. §4001 et seq.; the Dam Safety and Encroachments Act, 32 P.S. §693.1 et seq.; the Surface Mining Conservation and Reclamation Act, 52 P.S. §1396.1 et seq.; the Coal Refuse Disposal Control Act, 52 P.S. §30.51 et seq.; all other Pennsylvania statutes related to the protection of the environment; and all Pennsylvania statutes related to the protection of public health, safety, and welfare.

This permit is effective as of _____, and shall remain in effect until _____, unless revoked and reissued, or revoked in accordance with 25 Pa. Code §§75.278, 75.279 and 75.280, or continued.

PART I - STANDARD CONDITIONS

A. EFFECT OF PERMIT*

This permit authorizes only the management of hazardous waste expressly described in this permit and does not authorize any other management of hazardous waste. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under the Act or any other law governing protection of public health or the environment.

B. PERMIT ACTIONS*

This permit may be modified, revoked and reissued, revoked for cause as specified in 25 Pa. Code §§75.278, 75.279, and 75.280 or suspended in accordance with the Act. The filing of a request for a permit modification, revocation and reissuance, or revocation or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay or supersede the applicability or enforceability of any permit condition.

permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held to be invalid, the application of such provision to other circumstances and the remaining provisions of this permit shall not be affected thereby.

D. DEFINITIONS

For the purpose of this permit, terms used herein shall have the same meaning as those in Title 25 of the Pennsylvania Code (25 Pa. Code Chapter 75), unless this permit specifically states otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "The Department" is the Department of Environmental Resources of the Commonwealth of Pennsylvania.

E. REPORTS, NOTIFICATIONS AND SUBMISSIONS TO THE DEPARTMENT

All reports, notifications or other submissions which are required by this permit to be sent or given to the Department should be sent certified mail or given to:

F. SIGNATORY REQUIREMENTS*

All reports or other information requested by the Department shall be signed and certified as required by 25 Pa. Code §75.265(z)(13).

G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY SITE

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

1. Waste analysis plan required by 25 Pa. Code §75.264(c)(3) and this permit.
2. Personnel training documents and records required by 25 Pa. Code §75.264(f)(6) and this permit.

3. Contingency plan required by 25 Pa. Code §75.264(i)(9)(i) and this permit.
4. Closure [and post-closure] plan(s) required by 25 Pa. Code §75.264(o)(3) and §75.264(o)(16) and this permit.
5. Annually-adjusted cost estimate(s) for facility closure [and post-closure] required by 25 Pa. Code §75.319 and this permit.*
6. Operating record required by 25 Pa. Code §75.264(k) and Part II, Section H.1 of this permit.
7. Inspection schedules and logs required by 25 Pa. Code §75.264(e)(2)(i) and this permit.
8. Documents required by Part I, Sections _____, and Part II, Sections _____ of this permit.

H. DUTIES AND REQUIREMENTS*

1. Duty to Comply. The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and the regulations promulgated thereunder and is grounds for enforcement action; for permit revocation, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. Duty to Reapply. If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must submit a complete application for a new permit at least 180 days before this permit expires.

3. Permit Expiration. This permit and all conditions therein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application and through no fault of the Permittee, the Department has not issued a new permit.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action to argue that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. In the event of noncompliance with the Act, the regulations, or this permit, the Permittee shall take all necessary steps to prevent and abate any releases to the environment, and shall carry out such measures as are necessary to prevent significant adverse impacts on human health or the environment.

6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of storage, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the Act, the regu-

lations, and the conditions of this permit. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall operate back-up or auxiliary facilities or similar systems if necessary to achieve compliance with the Act, the regulations and the conditions of the permit.

7. Duty to Provide Information. The Permittee shall furnish to the Department within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or revoking this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Department, upon request, copies of records required to be kept by the Permittee pursuant to the Act, the regulations, or any permit condition.

8. Inspection and Entry. The Permittee shall allow the Department, its agents and authorized representatives, upon the presentation of credentials and other documents as may be required by law, or without advance notice or a search warrant to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where

records concerning the regulated facility or activity are kept;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the Act, the regulations, or this permit;
 - d. Sample or monitor any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by the Act or the regulations; and
 - e. Engage in any other activities necessary or appropriate to the documentation of events or conditions at any locations.
9. Monitoring and Records.

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 25 Pa. Code §75.261 or an equivalent method approved by the Department. Laboratory methods must be those specified in Appendix III of 25 Pa. Code §75.261; Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (U.S. EPA Document SW-846, July 1982; 2nd ed.); Standard

Methods of Waste Water Analysis (U.S. EPA; 15th ed.; 1980); or an equivalent method approved by the Department and as specified in the attached waste analysis plan.

b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by the Act, the regulations, or this permit, and all records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record, or application. These periods may be extended by request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

c. The Permittee shall maintain records of all groundwater quality and groundwater surface elevations for the active life of the facility and during the post-closure care period as well.

d. The Permittee shall, at a minimum, keep monitoring records which include the following information:

(1) The dates, exact place, and times of sampling or measurements;

- (2) The individuals who performed the sampling or measurements;
- (3) The dates analyses were performed;
- (4) The individuals who performed the analyses;
- (5) The analytical techniques or methods used;
- (6) The results of such analyses; and
- (7) [Insert here other sampling, measurement, or analysis conditions, if required.]

10. Reporting Planned Changes. The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. This notice must include a description of all incidents of noncompliance reasonably expected to result from the proposed changes. The Permittee shall not modify the facility without first obtaining a permit from the Department.

11. Anticipated Noncompliance. The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

12. Transfer of Permits. This permit shall not be transferred or assigned to any other person or municipality.

13. Twenty-Four Hour Reporting. The Permittee shall report to the Department any noncompliance with the Act, the regulations or any condition of this permit or any occurrence or event at the facility which may endanger health or the environment.

a. Information shall be provided orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances.

This report shall include the following:

(1) Information concerning release or potential release of any hazardous waste from the facility that may endanger public drinking water supply sources.

(2) Any information of a release, potential release, or discharge of hazardous waste from the facility, or information of a potential or actual fire or explosion at the facility, which may threaten the environment or human health.

b. The description of the occurrence and its cause shall include:

- (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident;
 - (4) Name and quantity of material(s) involved;
 - (5) The extent of injuries, if any;
 - (6) An assessment of actual or potential hazards to the environment and human health at or near the facility; and
 - (7) Estimated quantity and disposition of recovered material that resulted from the incident.
- c. A written submission shall also be provided to the Department within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times); if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Department extends it to fifteen (15) days.

14. Other Noncompliance. The Permittee shall report to the Department all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition I.H.13.
15. Other Information. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Department, or whenever the Permittee becomes aware of circumstances which require a modification or clarification of any fact or representation made to the Department in connection with a permit application, it shall promptly submit such facts or information to the Department.

[OPTIONS]

[For New Facilities]

— DOCUMENTS TO BE SUBMITTED PRIOR TO OPERATION*

The Permittee shall submit the following documents to the Department for written approval prior to commencing operation of the facility. [Specify documents, such as Form 6, as-built plans, waste analyses, etc.]

[For Facilities Requiring Compliance Schedules]

— COMPLIANCE SCHEDULE REPORTING*

The Permittee shall submit written reports of compliance or noncompliance with interim and final requirements contained in any compliance schedule of this permit to the Department no later than fourteen (14) days following each schedule date.

[For New or Modified Facilities]

— CERTIFICATION OF CONSTRUCTION OR MODIFICATION*

The Permittee may not manage hazardous waste at the facility until:

1. The Permittee has submitted to the Department by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- 2a. The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
- 2b. The Department has either waived the inspection or has not within

fifteen (15) days notified the Permittee of its intent to inspect.

PART II - GENERAL FACILITY CONDITIONS

A. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to air, soil, surface water, or groundwater which could threaten human health or the environment.

B. GENERAL WASTE ANALYSIS

The Permittee shall follow the procedures described in the attached waste analysis plan, Attachment 1. The Permittee shall verify its waste analysis as part of its quality assurance program, in accordance with current EPA practices (Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, July 1982; 2nd ed.) or equivalent methods approved by the Department in accordance with procedures in 25 Pa. Code §75.260(c); and at a minimum maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations.

[The attached waste analysis plan must cover the requirements of 25 Pa. Code §75.264(c) and any additional requirements specific to the hazardous waste units covered by the permit.]

C. SECURITY

The Permittee shall comply with the security provisions of 25 Pa. Code §75.264(d)(2) and (3).

[This permit condition should be deleted if the owner/operator submits a waiver request and the request is granted. The administrative record should include documentation of the basis for granting the waiver request.]

D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection plan set out in the inspection schedule, Attachment 2. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 25 Pa. Code §75.264(e)(4). Records of inspections shall be kept as required by 25 Pa. Code §75.264(e)(5).

[The attached inspection schedule must include both the general inspec-

tions required by 25 Pa. Code §75.264(e)(2) and specific inspections required for the hazardous waste units covered by the permit.]

E. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by 25 Pa. Code §75.264(f). This training program shall follow the attached outline, Attachment 3. The Permittee shall maintain training documents and records as required by 25 Pa. Code §75.264(f)(6) and (7).

F. PREPAREDNESS AND PREVENTION

1. Required Equipment. At a minimum, the Permittee shall equip the facility with the equipment set forth in the PPC plan, Attachment 4, as required by 25 Pa. Code §75.264(h)(2).

2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in the previous permit condition and in Attachment 4 as necessary to assure its proper operation in time of emergency.

[The inspection schedule must include periodic inspections and/or testing of the equipment.]

3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm system as required by 25 Pa. Code §75.264(h)(4) and (5).

4. Required Aisle Space. At a minimum, the Permittee shall maintain aisle space as required by 25 Pa. Code §75.264(h)(6) and as shown on the plans and specifications, Attachment 5.

5. Arrangements with Local Authorities. The Permittee shall maintain arrangements with State and local authorities as required by 25 Pa. Code §75.264(h)(7). If State or local officials refuse to enter into or renew existing preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

G. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

1. Implementation of PPC Plan. The Permittee shall immediately carry out the provisions of the PPC plan, Attachment 4, and follow the emergency procedures described by 25 Pa. Code §75.264(i)(12)-(21) whenever there is a fire, explosion, emission or discharge of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

2. Copies of Plan. The Permittee shall comply with the requirements of 25 Pa. Code §75.264(i)(9).
3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the PPC plan, as required by 25 Pa. Code §75.264(i)(10).
4. Emergency Coordinator. The Permittee shall comply with the requirements of 25 Pa. Code §75.264(i)(11).
5. Emergency Procedures. The Permittee shall comply with the requirements of 25 Pa. Code §75.264(i)(12)-(21).

[The PPC plan must include, when applicable, evaluation and repair plans for tanks, waste piles, and surface impoundments.]

H. RECORDKEEPING AND REPORTING

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 25 Pa. Code §75.264(k)(1) and (2).
2. Quarterly Facility Report. The Permittee shall comply with all applicable quarterly facility report requirements of 25 Pa. Code §75.264(m)(1).

[This condition should be used for off-site treatment and disposal facilities.]

3. Annual Report.* The Permittee shall comply with all applicable annual report requirements of 25 Pa. Code §75.264(m)(3).

[This condition should be used for storage facilities and for captive treatment and disposal facilities.]

4. Required Reports. The Permittee shall comply with all applicable reporting requirements as described in Part I, Sections _____, and Part II, Sections _____ of this permit.

I. CLOSURE

[The attached closure plan must cover the general closure requirements of 25 Pa. Code §75.264(o) and specific closure requirements for the hazardous waste units covered by the permit.]

1. Performance Standard. The Permittee shall close the facility as required by 25 Pa. Code §75.264(o)(2) and in accordance with the closure plan, Attachment 6.

2. Amendment to Closure Plan. The Permittee shall amend the closure plan in accordance with 25 Pa. Code §75.264(o)(4) whenever necessary.
3. Notification of Closure. The Permittee shall notify the Department in writing at least 180 days prior to the date he expects the final volume of waste.
4. Time Allowed for Closure. After receiving the final volume of hazardous waste, the Permittee shall remove from the site all hazardous waste and shall complete closure activities in accordance with the schedules specified in the closure plan, Attachment 6.

[If the facility is a disposal facility, insert "or dispose of on-site" after "remove from the site".]

5. Disposal or Decontamination of Equipment. The Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by 25 Pa. Code §75.264(o)(8) and the closure plan, Attachment 6.
6. Certification of Closure. The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan as required by 25 Pa. Code §75.264(o)(9).

J. COST ESTIMATE FOR FACILITY CLOSURE [AND POST-CLOSURE CARE]*

1. Annual Adjustment. The Permittee shall adjust the closure [and post-

closure] cost estimate for inflation within 30 days after each anniversary of the date on which the first cost estimate was made as required by 25 Pa. Code §75.319(b).

2. Adjustment for Changed Conditions. The Permittee shall revise the cost estimate whenever there is a change in the facility's closure plan or in the measures necessary to prevent adverse effects upon the environment as required by 25 Pa. Code §75.319(c).

K. BONDING REQUIREMENT*

The Permittee shall maintain the [surety bond, collateral bond, phased deposit of collateral bond] submitted to and approved by the Department as required by 25 Pa. Code §75.321. The Permittee shall comply with all applicable bond replacement requirements of 25 Pa. Code §75.316.

L. LIABILITY INSURANCE*

The Permittee shall comply with the liability insurance requirements of 25 Pa. Code §75.332 and the documentation requirements of 25 Pa. Code §75.333~~x~~ and 334. These include the requirements to have and maintain liability coverage for sudden polluttional occurrences in the amount of at least \$2 million per occurrence with an annual aggregate of at least \$4 million, exclusive of legal defense costs, and for non sudden polluttional occurrences in the

amount of at least \$4 million per occurrence with an annual aggregate of at least \$8 million, exclusive of legal defense costs. The Permittee shall submit new certificates of liability insurance 60 days prior to the expiration of the current certificate.

[If a determination is made pursuant to 25 Pa. Code §75.332 that a larger amount of insurance is required, the permit writer should specify the larger amount in this permit condition.]

[OPTIONS]

[For Off-Site Facilities]

— REQUIRED NOTICES

1. Notice to The Department.* The Permittee shall notify the Department in writing at least four (4) weeks in advance of the date the Permittee expects to receive hazardous waste from a foreign source. Notice of subsequent shipments of the same waste from the same foreign source is not required.
2. Notice to Generator. When the Permittee plans to receive hazardous waste from an off-site source (except where the Permittee is also the generator), he must inform the generator in writing that he has the appropriate permits for, and will accept, the waste the generator is

shipping. The Permittee must keep a copy of this written notice as part of the operating record. (See permit condition II.H.1).

[For Ignitable, Reactive or Incompatible Wastes]

— GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee shall comply with the requirements of 25 Pa. Code §75.264(g).
[Conditions specific to the hazardous waste units covered by the permit are specified in the appropriate modules. For example, requirements for ignitable wastes stored in the containers are specified in Module III.]

[For Off-Site Facilities]

— MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of 25 Pa. Code §75.264(j).

[For Disposal Facilities]

— POST-CLOSURE

1. Monitoring and Maintenance. The Permittee shall monitor and maintain the facility as required by 25 Pa. Code §75.264(o)(15) and (16) and

[(s)(3)(xxx)(E)*,(u)(25)*, (v)(3)(xxvi)(F) and (G)*] and in accordance with the post-closure plan, Attachment_____.

2. Amendment to Post-Closure Plan. The Permittee shall amend the post-closure plan in accordance with 25 Pa. Code §75.264(o)(17) and (18) whenever necessary.

[For Disposal Facilities]

— NOTICE TO LOCAL LAND AUTHORITY

The Permittee shall submit to the Department and to the municipality in which the facility is located a survey plat indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks in accordance with 25 Pa. Code §75.264(o)(19). In addition, the Permittee shall submit to the municipality and to the Department a record of the type, location, and quantity of hazardous waste disposed of within each cell or area of the facility in accordance with 25 Pa. Code §75.264(o)(19).

[For Facilities Located in the 100-Year Floodplain]

— FLOODPLAIN STANDARD

The Permittee shall comply with the requirements of 25 Pa. Code §75.264(z)(22).

PART III - STORAGE IN CONTAINERS

A. WASTE IDENTIFICATION

The Permittee may store the following wastes in containers at the facility, subject to the terms of this permit.

Hazardous Waste Code

Description

B. DURATION OF STORAGE

The Permittee shall not store containers of hazardous waste at this facility in excess of one year. [The definition of storage establishes a rebuttable presumption that containment of waste in excess of one year is disposal. If the permit application presents clear and convincing evidence

to the contrary, then this permit condition should be deleted. The permit writer may establish a longer duration, rather than deleting the permit condition. The basis for allowing a longer duration must be documented.]

C. CONDITION OF CONTAINERS

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

D. PLACEMENT REQUIREMENTS

The Permittee shall store all hazardous waste containers in accordance with the following volume, content and location requirements:

1. Area # _____	Permitted Waste Codes
Location _____	_____ [For each area or each cell]
_____	_____
_____	_____

a. Cell# _____
(1) Description _____
(2) Maximum Volume of Waste Allowed _____
(3) Maximum Number of Containers Allowed _____

b. Cell# _____
(1) Description _____
(2) Maximum Volume of Waste Allowed _____
(3) Maximum Number of Containers Allowed _____

2. Area # _____ Permitted Waste Codes
Location _____ [For each area or each cell]

a. Cell# _____
(1) Description _____
(2) Maximum Volume of Waste Allowed _____
(3) Maximum Number of Containers Allowed _____

b. Cell# _____
(1) Description _____

(2) Maximum Volume of Waste Allowed _____

(3) Maximum Number of Containers Allowed _____

E. COMPATIBILITY OF WASTES WITH CONTAINERS

The Permittee shall assure that the ability of the container to contain the waste is not impaired as required by 25 Pa. Code §75.264(q)(2).

F. MANAGEMENT OF CONTAINERS

The Permittee shall manage containers as required by 25 Pa. Code §75.264(q)(3) and (4).

G. CONTAINMENT

The Permittee shall construct and/or maintain the containment system as required by 25 Pa. Code §75.264(q)(10)-(12) and the attached plans and specifications, Attachment ____.

H. CONTAINER STACKING HEIGHT, WIDTH, AND DEPTH

The Permittee shall store containers of hazardous waste as required by 25 Pa. Code §75.264(q)(14) and the attached plans and specifications, Attachment ____.

[OPTIONS]

[For Facilities Which Handle Ignitable or Reactive Wastes]

___ SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

The Permittee shall not locate containers holding ignitable or reactive wastes within 15 meters (50 feet) of the facility's property line, nor within 40 feet of a building.

[For Facilities Which Handle Incompatible Waste]

___ SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. Placement of Incompatible Wastes. Prior to placing incompatible wastes and/or materials in the same container, the Permittee shall follow the procedures specified in Attachment _____. [If the application does not

address this requirement or if the application specifies that incompatible wastes will not be placed in the same container, the permit writer should draft a condition prohibiting this activity.]

2. Incompatible Wastes in Unwashed Containers. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
3. Storage of Incompatible Wastes. The Permittee shall store containers of incompatible wastes as indicated in the attached plans, Attachment ___, as required by 25 Pa. Code §75.264(q)(9).
4. Documentation. The Permittee must document compliance with sections (1) and (2) of this condition as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record (permit condition II.H.1.).

[For Facilities Which Handle Containers From Off-Site]

___ WEIGHING OR MEASURING FACILITIES

The Permittee shall provide, maintain, and operate weighing or measuring facilities as required by 25 Pa. Code §75.264(q)(6).

[For Facilities Which Handle Containers From Off-Site]

— OPERATING HOURS

The Permittee shall maintain at the entrance to the facility a sign displaying the hours of operation. The lettering shall be a minimum of four inches in height and of a color contrasting with its background.

— [Other conditions necessary to specify liner materials, location of specific wastes, materials of construction, requirements for the base or containment system, etc.]

PART IV - STORAGE/TREATMENT IN TANKS

A. WASTE IDENTIFICATION

The Permittee may store/treat the following hazardous waste in tanks, subject to the terms of this permit:

a. Tank No(s).

Hazardous Waste No.

b. Tank No(s).

Hazardous Waste No.

c. Tank No(s).

Hazardous Waste No.

B. DURATION OF STORAGE

The Permittee shall not store hazardous wastes in tanks at this facility in excess of one year. [The definition of storage establishes a rebuttable presumption that containment of waste in excess of one year is disposal. If the permit application presents clear and convincing evidence to the contrary, then this permit condition should be deleted. The permit writer may establish a longer duration, rather than deleting the permit condition. The basis for allowing a longer duration must be documented.]

C. DESIGN AND CONSTRUCTION OF TANKS

The Permittee shall construct, modify, and maintain all tanks in accordance with the plans and specifications in Attachment _____. The Permittee shall

maintain the minimum shell thickness specified below at all times to ensure sufficient structural strength.

<u>Tank No(s).</u>	<u>Minimum Shell Thickness (Inches)</u>
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____
e. _____	_____
f. _____	_____

D. PROTECTION FROM OVERFILLING

The Permittee shall prevent overfilling of tanks by the methods specified in Attachment ___ and summarized below.

<u>Tank No(s).</u>	<u>Type of Control</u>
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____
e. _____	_____

E. SECONDARY CONTAINMENT

The Permittee shall construct and/or maintain the containment structure as required by 25 Pa. Code §75.264(r)(6) and the attached plans and specifications, Attachment ____.

F. EMERGENCY REPAIRS; CONTINGENCY PLAN

1. The Permittee shall inspect the tanks in accordance with the Tank Evaluation and Repair (TER) Plan whenever there is any indication of a possible failure as required by 25 Pa. Code §75.264(r)(20).
2. Whenever there is evidence of tank failure, the Permittee shall remove the tank from service as required by 25 Pa. Code §75.264(r)(21) and implement the procedures required by 25 Pa. Code §75.264(r)(22) and specified in the PPC Plan, Attachment ____.
3. Prior to restoring it to service, the Permittee shall repair the tank and obtain a certification from a registered professional engineer that it meets the design specifications approved in this permit, as required by 25 Pa. Code §75.264(r)(24).

4. If a tank has been removed from service due to failure and is not being repaired, the permittee shall close it as required by 25 Pa. Code §75.264(r)(25).

G. ACCESS ROADS

The Permittee shall construct and/or maintain access roads as required by 25 Pa. Code §75.264(r)(26) and the attached plans and specifications, Attachment ____.

H. BUFFER ZONE

The Permittee shall establish and maintain a buffer zone of 50 feet between the property line and the permitted facility within which no solid waste treatment, storage, or disposal activities shall occur.

I. EQUIPMENT

1. Equipment Maintenance. The Permittee shall maintain tank operating equipment in operable condition and adequate in size and performance capability to assure that the facility operation will not be interrupted during normal working periods and that the facility operation is

in accordance with this permit.

- 2. Standby Equipment. The Permittee shall maintain standby equipment on-site or readily available for use in the event of a major equipment breakdown.

[OPTIONS]

[For Facilities Which Treat Wastes]

___ TREATMENT OF WASTES IN TANKS

The Permittee shall conduct all treatment operations in accordance with the procedures in Attachment ___.

[For Facilities Which Handle Corrosive Wastes]

___ PROTECTION FROM CORROSION

The Permittee shall protect tanks from accelerated corrosion, erosion, and abrasion as specified in Attachment ___ and summarized below.

	<u>Tank No(s).</u>	<u>Type of Protection</u>
a.	_____	_____
b.	_____	_____

- c. _____
- d. _____
- e. _____
- f. _____

[For Facilities Which Handle Ignitable or Reactive Wastes]

___ SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. Special Requirements. The Permittee shall not place ignitable or reactive waste in a tank unless the procedures described in Attachment ___ are followed.
2. Documentation. The Permittee shall document compliance with the above permit condition as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record (permit condition II.H.1).
3. NFPA Requirements. The Permittee shall comply with all applicable requirements for covered tanks listed in the National Fire Protection Association's "Flammable and Combustible Liquids Code, 1981", or latest revised edition.

[For Facilities Which Handle Incompatible Wastes]

___ SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. Incompatible Waste Precautions. The Permittee shall not place incompatible wastes in the same tank or place hazardous waste in an unwashed tank that previously held an incompatible waste or material unless the procedures specified in Attachment ___ are followed.
2. Documentation. The Permittee shall document compliance with the above permit condition as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record (permit condition II.H.1).

[For Facilities Which Treat or Store Varying Types of Wastes]

___ WASTE ANALYSIS

The Permittee shall conduct waste analyses and trial treatment or storage tests, or shall obtain written, documented information as required by 25 Pa. Code §75.264(r)(7) and the Waste Analysis Plan, Attachment ___, before chemically treating or storing a hazardous waste which is substantially different from waste previously treated or stored in a tank or before chemically treating hazardous waste with a substantially different process than previously used in a tank. The analyses, tests, and information shall be placed in the operating record (permit condition II.H.1).

[For Facilities Which Handle Wastes From Off-Site]

___ WEIGHING OR MEASURING FACILITIES

The Permittee shall provide, maintain and operate weighing or measuring facilities as required by 25 Pa. Code §75.264(r)(17).

[For Facilities Which Handle Wastes From Off-Site]

— OPERATING HOURS

The Permittee shall maintain at the entrance to the facility a sign displaying hours of operation. The lettering shall be a minimum of four inches in height and of a color contrasting with its background.

[For New or Modified Facilities]

— TANK CONSTRUCTION OR INSTALLATION

1. Inspections. The Permittee shall inspect the tank for uniformity, damage and imperfections during construction or installation.
2. Construction Practices. The Permittee shall use best engineering construction practices during all phases of installation and construction.
3. Quality Control Measures. The Permittee shall use the quality control

measures and tests specified in Attachment ____ to insure that installation and construction conform to the design materials and construction specifications approved in this permit.

4. Professional Engineer Certification. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction as required by 25 Pa. Code §75.264(r)(33). Each certification shall be submitted to the Department in accordance with the construction schedule, Condition IV. ____.
5. Construction Schedule. The Permittee shall construct or install the tank in accordance with the following schedule:

[Insert construction schedule, including interim dates and reporting requirements]

[As Appropriate]

__ SURFACE WATER MANAGEMENT

1. Design Standards. The Permittee shall manage surface water on the site as required by 25 Pa. Code §75.264(r)(28) and the plans and specifications in Attachment ____.
2. Run-Off. The Permittee shall manage surface water run-off as required by 25 Pa. Code §75.264(r)(29) and the plans and specifications in

Attachment ____.

3. Run-On. The Permittee shall control run-on as required by 25 Pa. Code §75.264(r)(30) and the plans and specifications in Attachment ____.

[As Appropriate]

___ DUST CONTROL

The Permittee shall prevent dust from hampering site operations or from causing health or safety hazards or nuisances.

[As Appropriate]

___ WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste within or outside the site as required by 25 Pa. Code §75.264(r)(39).

[As Appropriate]

___ VECTOR, ODOR, AND NOISE CONTROL

The Permittee shall carry out vector, odor, and/or noise control proce-

dures as required by 25 Pa. Code §75.264(r)(34) and the Vector, Odor, and Noise Control Plan, Attachment ____.

[As Appropriate]

— UNLOADING AREAS

The Permittee shall maintain unloading areas to permit vehicles to unload promptly.

PART V - INCINERATION

[Note: This part plus Part VI cover the four phases of incineration operation from (1) shakedown through (2) trial burn and (3) post-trial burn to (4) final operation. Part V is intended to set the design and construction parameters, plus the conditions for the final operation phase for both existing and new incineration facilities. The conditions in Part V are those which the Permittee must comply with during the full term of the permit.

Part VI covers the shakedown, trial burn and post-trial burn operating periods. The conditions in Part VI are applicable only until the conditions in Part V can be verified by a trial burn.

If the incineration facility meets the exemption criteria set forth in 25 Pa. Code §75.264(w)(26), then this Part will only contain condition A (construction/maintenance). The Waste Analysis Plan (condition II.B) must cover the requirements of 25 Pa. Code §75.264(w)(3), (4) and (10). Documentation of the basis for the exemption must be recorded in the administrative record.

For permits that do not include the exemption (i.e., those facilities that are permitted based on trial burns or data in lieu of a trial burn), compliance with certain incineration requirements should be set through conditions in other parts of the permit as set forth below:

<u>Requirement</u>	<u>Subject</u>	<u>Part - Condition</u>
75.264(w)(3)	Waste Analysis	II.C

The permit conditions and parameters presented below cover the remaining regulatory requirements of 25 Pa. Code §75.264(w)].

A. CONSTRUCTION [For new facilities]

The Permittee shall construct and maintain the incinerator in accordance with the attached plans and specifications, Attachment ___ [or equivalent]. The Permittee shall not feed hazardous wastes to the incinerator until compliance with Condition I. ___ (Certification of Construction or Modification) has been attained.

1. Construction Practices. The Permittee shall use best engineering construction practices during all phases of installation and construction as required by 25 Pa. Code §75.264(w)(14).
2. Quality Control Measures. The Permittee shall use the quality control measures and tests specified in Attachment ___ to ensure that installation and construction conform to the design materials and construction specifications set forth in this permit as required by 25 Pa. Code §75.264(w)(15).
3. Professional Engineer Certification. The Permittee shall obtain a

written certification from a registered professional engineer for each phase of installation or construction as required by 25 Pa. Code §75.264(w)(16). Each such certification shall be submitted to the Department in accordance with the construction schedule, condition V.A.4.

4. Construction Schedule. The Permittee shall construct or install the incineration facility in accordance with the following schedule:
[Insert construction schedule, including interim dates and reporting requirements.]

A. MAINTENANCE [For existing facilities]

The Permittee shall maintain the facility in accordance with the attached design plans and specifications, Attachment ____ [or equivalent].

[The permit writer should note that under 25 Pa. Code §75.264(w)(6), the incinerator must be designed, constructed and maintained so that it will meet the performance standards when operated in accordance with the permitted operating conditions. The permit writer is responsible for assuring that the attached plans and specifications are sufficiently comprehensive and technically adequate to meet this regulatory requirement.]

B. PERFORMANCE STANDARD*

The Permittee shall [design, construct and] maintain the incinerator so that, when operated in accordance with the operating requirements specified in this permit, it will meet the following performance standards as required by 25 Pa. Code §75.264(w)(6):

1. The incinerator shall achieve a destruction and removal efficiency (DRE) of 99.99% for each Principal Organic Hazardous Constituent (POHC) designated in this permit or approval for each waste feed. DRE shall be determined for each POHC using the equation specified in 25 Pa. Code §75.264(w)(6)(i).
2. If the incinerator produces stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen halide, then hydrogen halide emissions must be controlled such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or 1% of the hydrogen halide in the stack gas prior to entering any pollution control equipment.
3. The incinerator shall not emit particulate matter in excess of 180 milligrams per dry standard cubic meter based on the more stringent of the computation methods presented in 25 Pa. Code §75.264(w)(6)(iii)(A) and (B).

[25 Pa. Code §75.264(w)(6)(iii)(c) states that the Department may

specify an alternative (more stringent) particulate emission standard pursuant to Chapter 141, Section 141.1. An alternative standard is appropriate where emissions of metals threaten the protection of public health or where violations of air quality standards, as specified in Chapter 14, could occur.]

[Note: The data to be used in specifying permit conditions in V.C. and V.D. below must be based on the trial burn results (for those facilities conducting a trial burn) or on data in lieu of a trial burn showing that the performance standards specified above will be met.]

C. LIMITATION ON WASTES

Except during the periods specified in conditions VI.A, B and C [for facilities that conduct trial burns], the Permittee shall incinerate only the following hazardous wastes as required by 25 Pa. Code §75.264(w)(5).

[There are two options for identifying the allowable waste feed to the incinerator. The first option covers situations where it is not practical to list all of the wastes that a facility might be permitted to burn. In this option criteria are identified to establish limitations on the physical and chemical characteristics of the waste input to the incinerator. The second option is more appropriate for so-called "on-site" incinerators used as a part of a chemical process or manufactur-

ing operation. Here, it is usually straight-forward to specifically identify the wastes or classes of waste that the Permittee is permitted to burn. Examples of recommended language for these two options are presented below.]

OPTION 1:

- o The Permittee shall not incinerate any hazardous organic constituent having a heat of combustion less than ____ Kcal/gm. [The specified heat of combustion should be that of the POHC with the lowest heat of combustion which was burned at a DRE of at least 99.99% in the trial burn (or which was so reported in the data submitted in lieu of a trial burn).]

- o The ash content of the waste shall be no greater than ____%.

- o The physical form of the waste shall be _____. [Specify whether the waste is in the form of a solid, liquid or contained gas. For example, for a liquid injection incinerator, specify a liquid with a maximum viscosity of ____ centipoise.]

OPTION 2:

Hazardous Waste Number	Description	Feed Rate
D003, D004, D008	Freezon 123t reactor bottoms	[Specify feed rates in

D001

Freezon 122b spent liquor

appropriate units —

Kcal/hr or Kg/hr]

[The permit writer may impose other limitations on the waste feed as necessary to ensure compliance with the performance standards. All such limitations, however, should be derived from the results of the trial burn or from the data submitted in lieu of a trial burn.]

D. OPERATING CONDITIONS

Except during the periods specified in Conditions VI.A, B, and C [for facilities that conduct trial burns] the Permittee shall feed the wastes described in condition V.C. to the incinerator only under the following conditions as required by 25 Pa. Code §75.264(w)(7):

[It is possible that an incinerator can be permitted for more than one waste feed (e.g., the incinerator could operate on one definable waste feed during the summer and another during the winter.) In such cases, a complete set of operating limits must be specified for each waste feed.

Each set of operating conditions must directly relate to achieving the performance standards. If the Permittee complies with the permit operating conditions, but it is later shown that the performance stan-

dards are not being attained, the permit may be modified or revoked and reissued. Under such circumstances, enforcement actions cannot be taken. However, violation of the permit operating conditions could lead to enforcement action.]

1. Carbon monoxide (CO) level in the stack gas, measured as specified in condition V.F, shall not exceed ____ ppm at any time and shall not exceed ____ ppm for ____ consecutive minutes.
2. Waste feed rate, measured as specified in condition V.F., shall not exceed ____ Kg/hour.
3. Combustion temperature, measured as specified in condition V.F, shall be maintained at ____ °C or greater.
4. Residence time in the combustion chamber, measured as combustion chamber volume (in cubic meters) divided by the combustion gas velocity (in actual cubic meters per second, ACMS), shall be maintained at ____ seconds or greater.
5. Combustion gas velocity, measured as specified in condition V.F, shall be no greater than ____ ACMS.*

[The Permittee may choose to monitor an indicator of combustion gas velocity, rather than measure combustion gas velocity directly. However, the Permittee must demonstrate the correlation between the in-

indicator and combustion gas velocity on the permitted incinerator. Potential indicators include stack gas oxygen concentration, blower rotational speed and blower current draw.]

[Note: 25 Pa. Code §75.264(w)(7)(i)(E) allows for variations in incinerator system design or operating procedures, thus giving the permit writer some latitude if needed. However, such variations must be supported either from trial burn results or from data submitted in lieu of a trial burn.]

6. Opacity of the stack gas plume shall not be in excess of the standards set forth in 25 Pa. Code §123.41 when measured in accordance with the techniques specified in 25 Pa. Code §123.43.

[25 Pa. Code §75.264(w)(7)(i)(G) requires the permit writer to establish any other operating requirements that are necessary to ensure compliance with the performance standards. In addition to the permit conditions listed above, conditions must be established, where appropriate, to ensure compliance with the hydrogen halide removal standard and the particulate emissions standard. Examples of operating conditions that are applicable to hydrogen halide removal systems (scrubbers) are as follows:

- o Make-up water flow rate to the scrubber system, measured as specified in condition V.F, shall be maintained at _____ cubic meters per hour or greater.

- o Scrubber water recirculation rate, measured as specified in condition V.F, shall be maintained at ____ cubic meters per hour or greater. [Alternatively, minimum pressure drop across the scrubber could be specified.]
- o The pH of scrubber water discharge, measured as specified in condition V.F, shall be maintained at ____ or greater.

Scrubbers and, to a limited extent, baghouse collectors and electrostatic precipitators could be used to control particulate emissions. Operating conditions for scrubbers are listed below. For baghouse collectors, maximum stack gas temperature shall be specified along with a range for pressure drop (in mm of mercury) across the baghouse. For electrostatic precipitators, minimum voltage or current draw should be specified. As with all the other operating conditions that are specified, the values of the operating conditions will be site-specific and based on trial burn results or data submitted in lieu of a trial burn.]

7. During start-up and shut-down of an incinerator, hazardous wastes shall not be fed into the incinerator unless the incinerator is operating within the specified operating conditions and achieves a steady state condition.
8. The Permittee shall control fugitive emissions from the combustion zone

by _____. [Under 25 Pa. Code §75.264(w)(7)(iii), the Permittee must specify one of three methods for controlling fugitive emissions. The first method is to keep the combustion zone totally sealed against fugitive emissions. The second method is to maintain a combustion zone pressure lower than atmospheric pressure. The third is an alternative means of control that is demonstrated to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Any plans or specifications which delineate how fugitive emissions will be controlled under this third method should be referenced and attached.]

- 9. The Permittee shall cease operation of the incinerator when changes in waste feed (condition V.C), incinerator design (condition V.A), or operating conditions (condition V.D) exceed limits designated in this permit.

E. WASTE FEED CUT-OFF

The Permittee shall construct, maintain and calibrate the systems specified below to automatically cut off the hazardous waste feed to the incinerator at the levels specified below when the operating conditions deviate from the limits established in condition V.D.

System	Cut-Off Limits	Calibration Frequency	Test Frequency
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[Description and purpose of systems used]	1. Failure of elements of input control system	[Frequency at which accuracy is checked]	[Frequency at which operating readiness is checked]
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2. Combustion (or atomizing steam system) failure

3. Current failure from the flame detector and other safety devices

4. Failure of electrical power supply to the facility

[Levels at which waste feed will be cut off for other systems]

[Note: At a minimum, these conditions must meet the requirements of 25 Pa. Code §75.264(w)(7)(iv).]

F. FACILITY MONITORING

The Permittee shall monitor the incineration facility and record the data as specified below:

System	Purpose	Frequency of Monitoring	Frequency of Testing	Frequency of Calibration	Recording Method
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[At a minimum, this condition must specify monitoring systems that meet the requirements of 25 Pa. Code §75.264(w)(9). In addition, condition V.D contains specifications for various operating parameters which must be monitored. Each of these parameters must be addressed above. If the application specifies all the above information in a convenient way, then

the permit writer should attach and reference the applicable sections rather than preparing the above table.]

G. WASTE ANALYSIS MONITORING

The Permittee shall conduct waste analyses as required by 25 Pa. Code §75.264(w)(4) to verify that the waste feed to the incinerator is within the physical and chemical composition limits specified in condition V.C. These analyses shall be conducted according to the plans and specifications in Attachment _____. [Note: Alternatively, this condition could be made a part of condition II.B.]

H. OTHER DEPARTMENTAL PERMITS AND APPROVALS

The Permittee shall not operate the incinerator without making provisions for and receiving a Department permit and written approval for the disposal of ash (and scrubber water residues, scrubber water, and other residues as appropriate) as required by 25 Pa. Code §75.264(w)(11).

I. ACCESS ROADS

The Permittee shall construct and/or maintain access roads as required by 25 Pa. Code §75.264(w)(22) according to the plans and specifications in

Attachment ____.

J. BUFFER ZONE

The Permittee shall establish and maintain a buffer zone of 50 feet between the property line and the permitted facility within which no solid waste treatment, storage, or disposal activities shall occur as required by 25 Pa. Code §75.264(w)(13).

K. EQUIPMENT MAINTENANCE

The Permittee shall maintain the incineration facility equipment in operable condition and shall ensure that such equipment is of adequate capacity and performance capability so that facility operation will not be interrupted during normal working periods and so that the facility operation is in accordance with this permit as required by 25 Pa. Code §75.264(w)(18).

L. STANDBY EQUIPMENT

The Permittee shall maintain standby equipment on-site or readily avail-

able for use in the event of a major equipment breakdown as required by 25 Pa. Code §75.264(w)(19).

[OPTIONS]

— INCINERATION FACILITY MODIFICATIONS

1. Construction Practices. The Permittee shall use best engineering construction practices during all phases of installation and construction as required by 25 Pa. Code §75.264(w)(14).
2. Quality Control Measures. The Permittee shall use the quality control measures and tests specified in Attachment ____ to ensure that installation and construction conforms to the design materials and construction specifications set forth in this permit as required by 25 Pa. Code §75.264(w)(15).
3. Professional Engineer Certification. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction as required by 25 Pa. Code §75.264(w)(16). Each such certification shall be submitted to the Department in accordance with the construction schedule, condition .4.
4. Construction Schedule. The Permittee shall construct or install the

incineration facility in accordance with the following schedule:

[Insert construction schedule, including interim dates and reporting requirements.]

— ODOR AND NOISE CONTROL

The Permittee shall conduct odor and noise control procedures as required by 25 Pa. Code §75.264(w)(17) and as specified in the Odor and Noise Control Plan, Attachment _____. [An Odor and Noise Control Plan should be required in order to prevent health hazards or nuisances. Most incineration facilities are not expected to require such a plan.]

— UNLOADING AREAS

The Permittee shall maintain unloading areas to permit vehicles to unload promptly. [This condition should only apply to facilities handling wastes from off-site.]

— WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste by equipment or machinery within and outside the site as required by 25 Pa. Code

§75.264(w)(21). [For the most part, this condition should only apply to facilities receiving wastes from off-site. It could also be applied where wastes are transferred in several stages or across significant distances within a plant (i.e., the waste is generated at the north end of the chemical plant, but the incinerator is located at the south end of the plant).]

WEIGHING AND MEASURING FACILITIES

The Permittee shall provide, maintain, and operate weighing or measuring facilities as required by 25 Pa. Code §75.264(w)(23). [This condition does not apply to captive TSD facilities that handle liquids or flowable wastes (i.e., less than 20 percent solids) which are amenable to accurate flow measurement or to captive facilities that possess other waste inventory controls (i.e., volume controls.)].

OPERATING HOURS

The Permittee shall maintain a sign at the entrance to the facility displaying the hours of operation. The lettering shall be a minimum of four inches in height and of a color contrasting with its background as required by 25 Pa. Code §75.264(w)(24). [This condition only applies to facilities

handling waste from off-site.]

PART VI - SHORT TERM INCINERATOR PERMIT*

[Note: This part contains conditions that apply to an incineration facility only during the shakedown phase, trial burn phase and post-trial burn phase. After the post-trial burn phase (i.e., the final operation phase), this module is no longer valid. This module only applies to incineration facilities conducting a trial burn.

The purposes of this module are to permit the operation of an incineration facility in order to:

1. Determine operational readiness following completion of physical construction.
2. Control operating conditions after the trial burn and prior to any final modifications of the permit conditions in Part V to reflect the trial burn results.
3. Determine the feasibility of compliance with the performance standards, 25 Pa. Code §75.264(w)(6).
4. Determine adequate operating conditions that will ensure that the performance standards will be maintained.]

A. SHAKEDOWN PHASE

During the shakedown phase (the period beginning with the initial introduction of hazardous wastes into the incinerator and ending with the start of the trial burn), the Permittee shall comply with the following conditions: [Condition VI.A only applies to new incinerators. Existing incinerators operate under interim status.]

1. Duration of the Shakedown Period. The shakedown phase shall not exceed 720 hours of operating time for the treatment of hazardous wastes. The Permittee may petition the Department for extension of the shakedown phase for up to 720 hours. The Department may grant the extension when good cause is demonstrated in the petition in accordance with 25 Pa. Code §75.264(w)(25)(i).
2. Waste Feed Identification. During the shakedown phase, the Permittee may feed the following wastes to the incinerator, subject to the operating conditions specified in condition VI.A.3.

[The permit writer must specify which waste feeds the Permittee is allowed to incinerate during the shakedown phase. Any limitations on waste feeds must also be delineated. The format options presented in condition V.C

should be considered.

All limitations on the waste feed must be based on the permit writer's best judgment that the facility will meet the performance standards during the shakedown period. Thus, the permit writer may wish to limit the waste feed

to easily incinerable materials during this period. In some cases, it may be appropriate to specify wastes that are always chemically and physically uniform. Identification may then be the process name of the waste or some equivalent identifier. For waste feeds whose chemical and physical properties vary, limitations for these variations must be specified.]

3. Operating Conditions. During the shakedown phase, the Permittee shall feed the wastes described in condition VI.A.2 to the incinerator only under the following conditions:

[For each of the waste feeds specified in condition VI.A.2, the permit writer must establish operating conditions that, in the permit writer's best judgment, ensure compliance with the performance standards. Information used to establish these conditions can include the facility's Part B application and operating data from other similar incineration facilities.]

- a. Combustion temperature, measured as specified in condition VI.A.5,

shall be maintained at ____°C or greater.

- b. Combustion gas velocity, measured as specified in condition VI.A.5, shall be no less than ____ ACMS and no greater than ____ ACMS. The residence time in the combustion chamber, measured as combustion chamber volume (in cubic meters) divided by the combustion gas velocity (in ACMS), shall be maintained between ____ and ____ sec.
- c. Carbon monoxide (CO) levels in the stack gas, measured as specified in condition VI.A.5, shall not exceed ____ ppm at any time and shall not exceed ____ ppm for more than ____ minutes.

[For a new facility, the specification for carbon monoxide levels can be estimated based on a combustion of factors including engineering design, waste feed considerations and the operating history of other similar units. A realistic and precise value for CO levels should not be expected until the incinerator has had an opportunity to operate.]

- d. Waste feed rate, measured as specified in condition VI.A.5, shall not exceed ____ kg/hr.

[Note: For a discussion of additional permit conditions relating to hydrogen halide removal efficiency and particulate emissions limitations,

see the discussion in Part V. Note, however, that the permit writer has the discretion to impose more stringent operating conditions during the shakedown phase than those specified for the long-term or final operation phase. Since acceptable performance of a new incinerator cannot be demonstrated until the trial burn, the permit writer may limit operations to a waste with a higher heat of combustion than the proposed POHC's and restrict operating parameters so that the DRE requirement is unlikely to be violated. Do not specify feed rates (or heat rates, Kcal/hr.) significantly less than the incinerator's design rate since any reduction in turbulence in the combustion chamber could reduce the DRE efficiency.]

- e. Opacity of the stack gas plume shall not be in excess of the standards set forth in 25 Pa. Code §123.41 when measured in accordance with the techniques specified in 25 Pa. Code §123.43.
- f. During start-up and shut down of an incinerator, hazardous wastes shall not be fed into the incinerator unless the incinerator is operating within the specified operating conditions and achieves a steady-state condition.
- g. The Permittee shall control fugitive emissions from the combustion zone by _____. [Note: Compliance with 25 Pa. Code §75.263(w)(7) must be demonstrated.]
- h. The Permittee shall cease operation of the incinerator when changes in waste feed (condition VI.A.2), incinerator design (condition

VI.A), or operating conditions (condition VI.A.3) exceed limits designated in this permit.

4. Waste Feed Cut-Off. The Permittee shall construct, maintain and calibrate the systems specified below to automatically cut off the hazardous waste feed to the incinerator at the levels specified below when the operating conditions deviate from the limits established in condition VI.A.3.

System	Cut-Off Limits	Calibration Frequency	Test Frequency
[Description and purpose of system]	[Level at which waste feed will be cut off]	[Frequency at which accuracy is checked]	[Frequency at which operational readiness is checked]

[Note: At a minimum, these conditions must meet the requirements of 25 Pa. Code §75.264(w)(7)(iv).]

5. Facility Monitoring. The Permittee shall monitor the incineration facility and record the data as specified below:

System	Purpose	Frequency of Monitoring	Frequency of Testing	Frequency of Calibration	Recording Method
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[At a minimum, this condition must specify monitoring systems that meet the requirements of 25 Pa. Code §75.264(w)(9). In addition, condition VI.A.3 contains specifications for various operating parameters which must be monitored.

Each of these parameters must be addressed above. If the application specifies all the above information in a convenient way, then the permit writer should attach and reference the applicable sections rather than preparing a table.]

B. TRIAL BURN PHASE

1. Trial Burn Plan. The Permittee shall operate and monitor the incinerator during the trial burn phase as specified in the Trial Burn Plan, Attachment ____.

[The trial burn plan must meet the requirements of 25 Pa. Code §75.264(w)(27). The permit writer should add conditions if professional

judgment indicates that this is necessary to ensure compliance with the performance standards.]

2. Trial POHC(s). The trial POHCs for which DREs must be determined are:

Waste Feed

POHC(s)

[If the applicant wishes to establish different operating conditions for different waste feeds, then POHCs may be selected for each feed or feed group suggested by the applicant. For example, a facility may wish to designate two waste feeds. One of the waste feeds is a combination of several waste streams that are relatively "easy" to burn based on the POHCs. The second waste feed consists of several waste streams that are "difficult" to burn based upon those POHCs. The incinerator operating conditions for these two feeds may be different.

Before selecting POHCs for the trial burn, the permit writer should review Chapter 2 of the Guidance Manual for Hazardous Waste Incinerator Permits.]

3. Trial Burn Determinations. During the trial burn (or as soon after the trial burn as practicable) the Permittee shall make the determinations required by 25 Pa. Code §75.264(w)(29).

[Any other determinations that the permit writer believes will be needed to ensure that the trial burn will ensure compliance with the performance standards should be described as required by 25 Pa. Code §75.264(w)(29)(i)(J).]

4. Trial Burn Submissions. The Permittee shall submit a copy of all data collected during the trial burn to the Department upon completion of the burn. The Permittee shall submit to the Department the results of the determinations required by condition VI.B.3 within ninety (90) days of the completion of the trial burn. All submissions must be certified in accordance with 25 Pa. Code §75.265(z)(13).

C. POST-TRIAL BURN PHASE

During the post-trial burn phase (the period starting immediately after completing the trial burn and ending with the Department's specification of the permit operating conditions in Part V), the Permittee shall comply with the following conditions: [Note: Condition VI.C applies only to new incinerators.]

1. Waste Feed Identification. During the post-trial burn phase the Permittee may feed the following wastes at the facility, subject to the

requirements of condition VI.C.2.

[Note: The permit writer must identify which waste feeds the Permittee is allowed to incinerate during the post-trial burn phase. Any limitations on waste feeds also must be delineated. The format options presented in condition V.C should be considered. In some cases, an incinerator may accept only wastes that are chemically and physically uniform. All limitations on the waste feed must be based on the permit writer's professional judgment and should ensure that the facility will comply with the performance standard.]

2. Operating Conditions. During the post-trial burn phase, the Permittee shall feed the wastes described in condition VI.C.1 to the incinerator only under the following conditions:

[For each of the waste feeds specified in condition VI.C.1, the permit writer must establish operating conditions that, in the writer's professional judgment, ensure compliance with the performance standards.]

- a. Combustion temperature, measured as specified in condition VI.C.4, shall be maintained at ___°C or greater.
- b. Combustion gas velocity, measured as specified in condition VI.C.4,

shall be no less than ____ ACMS and no greater than ____ ACMS. The residence time in the combustion chamber, measured as combustion chamber volume (in cubic meters) divided by the combustion gas velocity (in ACMS), shall be maintained between ____ sec. and ____ sec.

- c. Carbon monoxide levels in the stack gas, measured as specified in condition VI.C.4, shall not exceed ____ ppm at any time and shall not exceed ____ ppm for more than ____ minutes.

[For a new facility, the specification for carbon monoxide levels can be estimated based on a combination of factors including engineering design, waste feed considerations and the operating history of other similar units. A realistic and precise value for CO levels should not be expected until the incinerator has had an opportunity to operate.]

- d. Waste feed rate measured as specified in condition VI.C.4, shall not exceed ____ kg/hr.

[For a discussion of additional permit conditions relating to hydrogen halide removal efficiency and particulate emissions limitation, see the discussion in Part V. Note, however, that the permit writer has the discretion to impose more stringent operating conditions during the post-trial burn phase than those specified for the long-term or final operation phase. Since the acceptable performance of a new incinerator cannot be guaranteed

until the trial burn results are known, the permit writer may limit operations to a waste with a higher heat of combustion than the proposed POHCs and restrict operating parameters so that the DRE requirement is unlikely to be violated. Do not specify feed rates (or heat rates, KCal/hr) significantly less than the incinerator's design rate since any reduction in turbulence in the combustion chamber could reduce the DRE efficiency.]

- e. Opacity of the stack gas plume shall not be in excess of the standards set forth in 25 Pa. Code §123.41 when measured in accordance with the techniques specified in 25 Pa. Code §123.43.
- f. During start-up and shut-down of the incinerator, hazardous wastes shall not be fed into the incinerator unless the incinerator is operating within the specified operating conditions and achieves a steady-state condition.
- g. The Permittee shall control fugitive emissions from the combustion zone by _____. [Compliance with 25 Pa. Code §75.264(w)(7) must be demonstrated.]
- h. The Permittee shall cease operation of the incinerator when changes in waste feed (condition VI.C.1), incinerator design (condition VI.A) or operating conditions (condition VI.C.2) exceed limits designated in this permit.

3. Waste Feed Cut-Off. The Permittee shall construct, maintain and calibrate the systems specified below to automatically cut off the hazardous waste feed to the incinerator at the levels specified below when the operating conditions deviate from the limits established in condition VI.C.2.

System	Cut-Off Limits	Calibration Frequency	Test Frequency
[Description and purpose of system]	[Level at which waste feed will be cut off]	[Frequency at which accuracy is checked]	[Frequency at which operational readiness is checked]

[At a minimum, these conditions must meet the requirements of 25 Pa. Code §75.264(w)(7)(iv).]

4. Facility Monitoring. The Permittee shall monitor the incineration facility and record the data as specified below:

Frequency of	Frequency	Frequency of	Recording
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System Purpose Monitoring of Testing Calibration Method

[At a minimum, this condition must specify monitoring systems that meet the requirements of 25 Pa. Code §75.264(w)(9). In addition, condition VI.C.2 contains specifications for various operating parameters which must be monitored.]

Each of these parameters must be addressed above. If the application specifies all the above information in a convenient way, then the permit writer should attach and reference the applicable sections rather than preparing a table.]

D. GENERAL PROVISIONS

During the shakedown phase, the trial burn and the post-trial burn phase, the Permittee shall comply with each of the conditions set forth below.

1. Waste Analysis Monitoring. The Permittee shall conduct waste analyses as required by 25 Pa. Code §75.264(w)(4) to verify that the waste feed to the incinerator is within the physical and chemical composition limits specified in conditions VI.A.2 and VI.C.1, as applicable. These analyses shall be conducted according to the plans and specifications

in Attachment ____.

2. Other Departmental Permits and Approvals. The Permittee shall not operate the incinerator without making provisions for and receiving the Departmental permit and written approval for the disposal of ash (and scrubber water residues, scrubber water, and other residues as appropriate) as required by 25 Pa. Code §75.264(w)(11).
3. Access Roads. The Permittee shall construct and/or maintain access roads as required by 25 Pa. Code §75.264(w)(22) according to the plans and specifications in Attachment ____.
4. Buffer Zone. The Permittee shall establish and maintain a buffer zone of 50 feet between the property line and the permitted facility within which no solid waste treatment, storage, or disposal activities shall occur as required by 25 Pa. Code §75.264(w)(13).
5. Equipment Maintenance. The Permittee shall maintain the incineration facility equipment in operable condition and shall ensure that such equipment is of adequate capacity and performance capability so that facility operation will not be interrupted during normal working periods and so that the facility operation is in accordance with this permit as required by 25 Pa. Code §75.264(w)(18).
6. Standby Equipment. The Permittee shall maintain standby equipment on-site or readily available for use in the event of a major equipment

breakdown as required by 25 Pa. Code §75.264(w)(19).

[OPTIONS]

___ INCINERATION FACILITY MODIFICATIONS

1. Construction Practices. The Permittee shall use best engineering construction practices during all phases of installation and construction as required by 25 Pa. Code §75.264(w)(14).
2. Quality Control Measures. The Permittee shall use the quality control measures and tests specified in Attachment ___ to ensure that installation and construction conforms to the design materials and construction specifications set forth in this permit as required by 25 Pa. Code §75.264(w)(15).
3. Professional Engineer Certification. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction as required by 25 Pa. Code §75.264(w)(16). Each such certification shall be submitted to the Department in accordance with the construction schedule, condition ___.4.
4. Construction Schedule. The Permittee shall construct or install the incineration facility in accordance with the following schedule:
[Insert construction schedule, including interim dates and reporting

requirements.]

— ODOR AND NOISE CONTROL

The Permittee shall conduct odor and noise control procedures as required by 25 Pa. Code §75.264(w)(17) and as specified in the Odor and Noise Control Plan, Attachment _____. [An Odor and Noise Control Plan should be required in order to prevent health hazards or nuisances. Most incineration facilities are not expected to require such a plan.]

— UNLOADING AREAS

The Permittee shall maintain unloading areas to permit vehicles to unload promptly. [This condition should only apply to facilities handling wastes from off-site.]

— WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste by equipment or machinery within and outside the site as required by 25 Pa. Code §75.264(w)(21). [For the most part, this condition should only apply to

facilities receiving wastes from off-site. It could also be applied where wastes are transferred in several stages or across significant distances within a plant (e.g., the waste is generated at the north end of the chemical plant, but the incinerator is located at the south end of the plant).]

WEIGHING AND MEASURING FACILITIES

The Permittee shall provide, maintain, and operate weighing or measuring facilities as required by 25 Pa. Code §75.264(w)(23). [This condition does not apply to captive TSD facilities that handle liquids or flowable wastes (i.e., less than 20 percent solids) which are amenable to accurate flow measurement or to captive facilities that process other waste inventory controls (i.e., volume controls).]

OPERATING HOURS

The Permittee shall provide a sign at the entrance to the facility displaying the hours of operation. The lettering shall be a minimum of four inches in height and of a color contrasting with its background as required by 25 Pa. Code §75.264(w)(24). [This condition only applies to facilities handling wastes from off-site.]

PART VII - THERMAL TREATMENT

[Note: The regulations for thermal treatment in 25 Pa. Code §75.265(x) currently are based on the federal interim status regulations. The 25 Pa. Code §75.265(x) regulations are not as comprehensive as Department regulations covering the operation of other hazardous waste processes such as incineration. For example, the thermal treatment regulations do not contain performance standards, automatic waste feed cut-off provisions or warning sign requirements. Permit conditions can only be set forth in this part where they are supported by specifically applicable Department regulations.

Because the thermal treatment regulations are not comprehensive, the permit writer is encouraged to issue permits using this part only where no other parts are applicable. In many cases, other parts can be used as discussed below.

In 25 Pa. Code §75.260, thermal treatment is defined as "the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge."

Thermal treatment in incinerators is subject to the comprehensive regulations of 25 Pa. Code §75.264(w). Incinerator permit conditions are provided in Parts V and VI. Many other thermal treatment processes could also be covered by

these conditions because they meet the 25 Pa. Code §75.260 definition of an incinerator: "an enclosed device using controlled flame combustion, the primary purpose of which is to thermally break down hazardous waste." These processes include oxygen incineration, calcination, boilers, and high temperature fluid wall incineration. Other thermal processes which do not directly utilize controlled flames, but which still could be covered by the incineration conditions include catalytic incineration, pyrolysis, molten salt incineration, and plasma arc pyrolysis. It is likely that the incineration condition and removal efficiency could not be applied per se since relatively large concentrations of products of incomplete combustion leave the oxidation vessel in liquid form).

Microwave discharge, noted above in the Department's definition of thermal treatment, is still in the early stages of development.

Other thermal processes such as distillation, evaporation and stream stripping can be covered by Part IV - Tanks.

Therefore, the most significant application of this module is for the detonation of waste explosives.

[Note that waste analysis conditions pursuant to 25 Pa. Code §75.264(c), inspection requirements pursuant to 25 Pa. Code §75.265(x)(4)(iii), and closure conditions pursuant to 25 Pa. Code §75.265(x)(5) for thermal treatment facilities should be included in Part II.]

A. CONSTRUCTION [For New Facilities]

The Permittee shall construct and maintain the thermal treatment facility in accordance with the attached plans and specifications, Attachment ____ [or equivalent]. The Permittee shall not feed hazardous wastes to the thermal treatment facility until compliance with condition I.D.11 (certification of construction or modification) has been attained.

B. MAINTENANCE [For Existing Facilities]

The Permittee shall maintain the facility in accordance with the attached design plans and specifications, Attachment ____ [or equivalent].

C. LIMITATION OF WASTES

The Permittee shall thermally treat only the following hazardous wastes as required by 25 Pa. Code §75.264(c).

[There are two options for identifying the allowable waste feed to a thermal treatment facility. The first option covers situations where it is not practical to list all of the wastes that a facility might be permitted to thermally treat. In this option, criteria are specified to establish limitations on the physical and chemical characteristics of the waste input to the facility. The second option simply entails identifying

each waste or class of waste that the Permittee is permitted to thermally treat. Examples of recommended language for these two options are presented below.]

OPTION 1:

- o The physical form of the waste shall be _____. [Specify whether the waste is in the form of a solid or liquid.]

- o The facility shall detonate only those waste explosive classified as DOT Class ____ [A, B or C]. [Class A explosives can detonate from a spark, flame, or small to moderate shock. Class A explosives include nitroglycerine, lead, ozide, and black powder. Class B explosives pose a hazard because they are rapidly combustible. Photographic flash power is a Class B explosive. Class C explosives do not ordinarily detonate in restricted quantities and, thus, are a minimum explosion hazard. Flares and small arms ammunition are examples of Class C explosives. Classes B and C explosives ordinarily explode only under extreme temperatures.]

- o No more than ____kg of waste explosives can be detonated as a single charge.

OPTION 2:

Hazardous Waste Number	Description	Charge Amount
K045	Spent carbon from the treatment of wastewater containing explosives	[Specify allowable quantities
P081	Nitroglycerine	that can be detonated at any one
P112	Tetranitromethane	time

C. ANALYSIS OF NEW WASTES

The Permittee shall analyze any type of waste which has not been previously treated in the thermal treatment process as required in 25 Pa. Code §75.265(x)(3) to establish and maintain appropriate operating conditions [such as waste charge quantities or auxiliary fuel requirements] and to determine the type of pollutants which might be emitted.

D. OPERATING CONDITIONS [For Continuous Process Operations]

Before adding hazardous waste, the Permittee shall bring the thermal treatment process to steady state conditions of operation, including operating temperature, using auxiliary fuel or other means as described in Attachment ____.

1. At steady state conditions, operating temperature will be maintained at no less than ____°C and no greater than ____°C.
2. Waste feed rate, measured as specified in condition VII.E, shall not exceed ____ kg/hour.
3. Process operating pressure, measured as specified in condition VII.E, shall not exceed ____ atmosphere.

[The above three conditions apply primarily to thermal treatment processes that are closed systems (i.e., those not having stacks for exhaust gas). Such systems include distillation and evaporation. Additional process operating conditions could be specified if the permit writer determines that further constraints are necessary to assure protection of human health and the environment.]

E. OPERATING CONDITIONS [For Open Burning Of Waste Explosives]

The Permittee shall openly burn or detonate waste explosives in accordance with the requirements of 25 Pa. Code §75.265(x)(6) and 25 Pa. Code §75.265(x)(7) and the plans and specifications in Attachment ____.

F. MONITORING

The Permittee shall monitor the thermal treatment facility and record the data as specified below:

System	Purpose	Frequency of Monitoring	Frequency of Testing	Frequency of Calibration	Recording Method
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[At a minimum, system operating temperature must be monitored at least every 15 minutes. In addition, if an emission control device is present, then its operating characteristics (e.g., scrubber recirculation flow rate, make-up water rate, pressure drop, temperature, precipitator voltage and amperage draw) must also be monitored at least every 15 minutes. Waste feed rate, auxiliary fuel feed rate, relevant process flow rates and level indicators must also be monitored at least every 15 minutes according to 25 Pa. Code §75.265(x)(4)(i).

Where applicable, the stack plume must be observed visually at least once each hour for color and opacity. 25 Pa. Code §75.265(x)(4)(ii) requires that the Permittee take any corrective actions necessary to correct apparent emissions from the stack and adjust the plume to its normal

appearance.]

PART VIII - WASTE PILES*

[This part is applicable to waste piles closed in accordance with 25 Pa. Code §75.264(t)(33). All wastes and contaminated materials are removed or decontaminated at closure.]

A. WASTE IDENTIFICATION

The Permittee may store the following hazardous wastes in waste piles, subject to the terms of this permit:

B. DURATION OF STORAGE

The Permittee shall not store hazardous waste in the waste pile at this facility in excess of one year. [See note after condition IV.B. regarding establishment of longer storage periods.]

C. DESIGN AND OPERATING REQUIREMENTS

1. The Permittee shall design, construct, and install a liner in accordance with the requirements of 25 Pa. Code §75.264(t)(4)(ii), as specified in the attached plans and specifications, Attachment ____.

[This condition does not apply to any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated, as stipulated by 25 Pa. Code §75.264(t)(3)(D). The attached plans and specifications must demonstrate compliance with 25 Pa. Code §75.264(t)(4)(ii). The liner must be constructed of materials that do not allow waste to migrate into the adjacent subsurface soil or groundwater or surface water during the active life of the facility.]

2. The Permittee shall provide a liner system with an effective life equal to or greater than the life of the pile.
3. The Permittee shall protect the liner system from plant growth, as required by 25 Pa. Code §75.264(t)(6).
4. The Permittee shall operate and maintain a subbase underlying the liners, as required by 25 Pa. Code §75.264(t)(4)(v).

5. The Permittee shall maintain, for all waste piles, a minimum distance of 20 inches between the top of the subbase and seasonal high groundwater table, as required by 25 Pa. Code §75.264(t)(7).
6. The Permittee shall design, construct, operate, and maintain a leachate collection and removal system according to the plans and specifications in Attachment ____ so that no standing liquids accumulate.
7. The Permittee shall operate and maintain a surface water run-off control system, as required by 25 Pa. Code §75.264(t)(8) and as specified in Attachment ____.
8. The Permittee shall design, construct, operate, and maintain a conveyance system and storage system for conveying and storing the leachate from the leachate and run-off collection system, as required by 25 Pa. Code §75.264(t)(9) and as specified in Attachment ____.
9. The Permittee shall operate and maintain a run-on control system, as required by 25 Pa. Code §75.264(t)(13) and as specified in Attachment ____.
10. The Permittee shall operate and maintain collection and holding facilities associated with run-on and run-off control systems, as required by 25 Pa. Code §75.264(t)(14) and as specified in Attachment ____.

11. The Permittee shall provide surface water management measures that conform to the provisions of Title 25, Chapter 102, Erosion Control Rules and Regulations and use the methods specified in Attachment ____.

[The permit writer may specify more stringent measures.]

12. The Permittee shall design, construct, operate, and maintain the site in a manner which prevents or minimizes surface water percolation into the hazardous waste deposits, as specified in Attachment ____.
13. The Permittee shall operate and maintain the waste pile so that, at all times, the pile remains at least 5 feet from the outer edge of the liner.
14. The Permittee shall cover or otherwise manage the pile to control wind dispersal or particulate matter, as required by 25 Pa. Code §75.264(t)(19) using the methods specified in Attachment ____.

[This condition only applies to waste piles containing particulate matter which may be subject to wind dispersal. The Attachment should incorporate plans or other drawings and specify methods used to insure satisfaction of 25 Pa. Code §75.264(t)(19) requirements.]

D. EXEMPTION FROM GROUNDWATER PROTECTION REQUIREMENTS

[Note: A permittee who satisfies the conditions outlined in 25 Pa. Code §75.264(t)(3)(ii) or (3)(iii) is not subject to regulation under 25 Pa. Code §75.264(n). In addition, a Permittee satisfying 25 Pa. Code §75.264(t)(3)(i) (i.e., the waste pile is inside or under a structure that provides protection from precipitation) is exempt from 25 Pa. Code §75.264(n). Such exemptions should be documented in the administrative record. The permit should specify all design and operating practices that are necessary to insure that the applicable requirements are met if an exemption is granted.]

[If 25 Pa. Code §75.264(t)(3)(ii) is applicable, consider use of the following permit language:]

1. The Permittee shall construct and operate a double lined waste pile according to the plans and specifications incorporated in Attachment ____ . According to the procedures specified in that attachment, the Permittee must install and monitor a leak detection system and operate a leachate collection system.

[If 25 Pa. Code §75.264(t)(3)(ii) is applicable and a detection monitoring program under 25 Pa. Code §75.264(n)(4) has not been established . . .)

2. If liquid leaks into the leak detection system, the Permittee must

notify the Department within 7 days. The Permittee must remove accumulated liquid, repair or replace the liner which is leaking, and provide certification from a registered professional engineer that the leak is fixed within ___ days of its detection.

[If 25 Pa. Code §75.264(t)(3)(iii) is applicable and a detection monitoring program under 25 Pa. Code §75.264(n)(4) has been established . . .]

3. The Permittee must begin to comply with the detection monitoring permit conditions within ___ days of detecting liquid in the leak detection system.

[If 25 Pa. Code §75.264(t)(3)(iii) is applicable, consider use of the following permit language:]

1. The Permittee shall design, construct, operate, and maintain the waste pile with a liner system meeting the requirements of 25 Pa. Code §75.264(t)(3)(iii) and according to the plans and specifications incorporated in Attachment ___.
2. The Permittee shall remove wastes from the pile once every [specify time period] and inspect the liner for deterioration, cracks, or other conditions that may result in leaks.
3. The Permittee shall install a leachate collection system above the

liner that meets the requirements of 25 Pa. Code §75.264(t)(4)(i) in accordance with the plans and specifications incorporated in Attachment ____.

[If 25 Pa. Code §75.264(t)(3)(iii) is applicable and a detection monitoring program under 25 Pa. Code §75.264(n)(4) has not been established . . .]

4. If liquid leaks into the leak detection system, the Permittee must notify the Department within 7 days. The Permittee must remove accumulated liquid, repair or replace the liner which is leaking, and provide certification that the leak is fixed within ____ days of its detection.

[If 25 Pa. Code §75.264(t)(3)(iii) is applicable and a detection monitoring program under 25 Pa. Code §75.264(n)(4) has been established . . .]

5. The Permittee must begin to comply with the detection monitoring permit conditions within ____ days of detecting liquid in the leak detection system.

[If 25 Pa. Code §75.264(t)(3)(i) is applicable:]

1. The Permittee shall design and construct the waste pile to be inside or under a protective structure which prevents generation of run-off or

leachate or surface water run-on, controls dispersal of wastes by wind, and is underlined by an impermeable membrane as required by 25 Pa. Code §75.264(t)(3)(i) and as specified in the attached plans and specifications, Attachment ____.

2. The Permittee shall not store liquids or materials containing free liquids in the pile. Further, no wastes shall be placed in the pile if leachate would be generated as a result of decomposition or other reactions.

E. EMERGENCY REPAIRS; CONTINGENCY PLAN

1. The Permittee shall inspect the liner system in accordance with the Waste Pile Evaluation and Repair (WPER) Plan whenever there is any indication of a possible failure as required by 25 Pa. Code §75.264(t)(22).
2. Whenever there is evidence of a failure of the liner system, including evidence of liquid in the leak detection system, deterioration, cracking or other condition that is or could cause leaking, the Permittee shall remove the waste pile from service as required by 25 Pa. Code §75.264(t)(23). The Permittee also shall immediately implement the procedures required by 25 Pa. Code §75.264(t)(24) and specified in the PPC Plan, Attachment ____.

3. Prior to restoring it to service, the Permittee shall repair the liner system and obtain a certification from a registered professional engineer that it meets the design specifications approved in this permit, as required by 25 Pa. Code §75.264(t)(25).
4. If a waste pile has been removed from service due to liner system failure, and it is not to be repaired and restored to service, the Permittee shall close it as required by 25 Pa. Code §75.264(t)(26).

F. ACCESS ROADS

The Permittee shall construct and/or maintain access roads in accordance with 25 Pa. Code §75.264(t)(29) and as specified in the plans and specifications of Attachment ____.

G. BUFFER ZONE

The Permittee shall establish and maintain a buffer zone of 50 feet between the property line and the permitted facility within which no solid waste treatment, storage, or disposal activities shall occur.

H. EQUIPMENT

1. The Permittee shall maintain waste pile operating equipment in oper-

able condition and adequate in size and performance capability to assure that the facility operation will not be interrupted during normal working periods and that the facility operation is in accordance with this permit.

2. The Permittee shall maintain standby equipment on-site or readily available for use in the event of a major equipment breakdown.

[OPTIONS]

[For Facilities Which Handle Ignitable or Reactive Wastes]

___ SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE

1. The Permittee shall not place ignitable or reactive waste in a waste pile unless the procedures described in Attachment ___ are followed, as required by 25 Pa. Code §75.264(t)(36).

[The Attachment must demonstrate how the facility will handle or treat ignitable and reactive wastes and protect such wastes from ignition, as required by 25 Pa. Code §75.264(t)(36). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit to prohibit this practice.]

2. The Permittee shall document compliance with the above permit condi-

tion as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

[For Facilities Which Handle Incompatible Wastes]

___ SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes or incompatible wastes and materials in the same waste pile unless the procedures specified in Attachment ___ are followed to meet the requirements of 25 Pa. Code §75.264(g)(2), as required by 25 Pa. Code §75.264(t)(37). Further, waste shall be separated from any nearby incompatible material as required by 25 Pa. Code §75.264(t)(37) and (t)(38).

[The Attachment must specify how the Permittee will handle incompatible wastes to comply with 25 Pa. Code §75.264(g)(2), namely, to implement precautions to prevent generation of heat, production of toxic fumes, production of flammable fumes, damage to the facility, or any threat to human health and the environment. If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit to prohibit placement of incompatible wastes in the waste pile.]

2. The Permittee shall document compliance with the above permit condition as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

3. The Permittee shall not place hazardous wastes on the same waste pile base where incompatible wastes or materials were previously piled, as required by 25 Pa. Code §75.264(t)(38).

[As Appropriate]

___ DOUBLE LINER SYSTEMS

1. The Permittee shall design, construct, operate, and maintain a secondary liner, as required by 25 Pa. Code §75.264(t)(4)(iii) and as specified in Attachment ___.
2. The Permittee shall design, construct, operate, and maintain a leak detection system between the liners, as required by 25 Pa. Code §75.264(t)(4)(iv) and as specified in Attachment ___.

[As Appropriate]

___ TREATMENT FACILITIES RECEIVING LEACHATE AND RUN-OFF FOR STORAGE

1. The Permittee shall design, construct, operate, and maintain the treatment facilities for receiving leachate and run-off from storage, as specified in Attachment ___.

2. The Permittee shall maintain a treatment facility flow rate of _____ gallons per day for each acre of active area.

[The regulations require a minimum design flow rate of 15,000 gallons per day for each acre of active area. The permit writer should establish an actual flow rate of at least 15,000 gallons per day unless the permit application demonstrates that a lesser rate is sufficient. The basis for the flow rate established in the permit must be documented in the administrative record.]

3. The Permittee shall operate and maintain treatment facilities that are compatible with and capable of treating the waste constituents expected to be present in the leachate and run-off, and the anticipated volumes of waste.

[As Appropriate]

— SPECIAL REQUIREMENTS FOR WIND DISPERSAL CONTROL MECHANISMS

The Permittee shall operate and maintain the facility to control wind dispersal in the following manner:

(Insert, as appropriate, special requirements for wind dispersal control that are in addition to condition VIII.B.14.)

[For Facilities Which Handle Waste From Off-site]

— WEIGHING AND MEASURING FACILITIES

The Permittee shall provide, operate, and maintain weighing or measuring facilities, as required by 25 Pa. Code §75.264(t)(27).

[For Facilities Which Handle Waste From Off-site]

— HOURS OF OPERATION

The Permittee shall maintain a sign displaying the hours of operation at the entrance to the facility. The lettering shall be a minimum of 4 inches in height and of a color contrasting with the background.

[For New or Modified Facilities]

— CONSTRUCTION AND INSTALLATION

1. The Permittee shall inspect the liner system for uniformity, damage, and imperfections during construction or installation. Manufactured liner materials (such as membranes, sheets, and coatings) shall be inspected to ensure tight seams and joints and the absence of tears or blisters.
2. The Permittee shall use best engineering construction practices during all phases of installation and construction.

3. The Permittee shall use quality control measures and tests, as required by 25 Pa. Code §75.264(t)(16) and as specified in Attachment ____.

4. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction, as required by 25 Pa. Code §75.264(t)(17). Each certification shall be submitted to the Department in accordance with the construction schedule, condition VIII. __.5.

5. The Permittee shall construct or install the waste pile in accordance with the following schedule:

(Insert construction schedule,
including interim dates and reporting requirements)

[As Appropriate]

 VECTOR, ODOR, AND NOISE CONTROL

The Permittee shall carry out vector, odor, and/or noise control procedures, as required by 25 Pa. Code §75.264(t)(39) and the Vector, Odor, and Noise Control Plan in Attachment .

[As Appropriate]

 UNLOADING AREAS

The Permittee shall operate and maintain unloading areas, as specified in Attachment . Unloading areas shall permit vehicles to unload promptly.

[As Appropriate]

 DUST CONTROL

The Permittee shall prevent dust from hampering site operations or from causing health or safety hazards and nuisances, as specified in Attachment .

[As Appropriate]

WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste within or outside the site, as required by 25 Pa. Code §75.264(t)(44) and specified in Attachment ____.

PART IX - LANDFILLS

A. WASTE IDENTIFICATION

The Permittee may dispose of the following hazardous wastes in landfill units at the facility, subject to the terms of this permit:

[If the application defines the universe of hazardous wastes to be disposed in the landfill as all regulated hazardous wastes or the majority of the regulated wastes, then attach the list to the permit. If the application defines the universe of hazardous wastes as a smaller group of wastes (i.e., up to 25 wastes), then identify the wastes in condition IX.A using the following format:

Hazardous Waste Code

Description

The permit writer can also specify the types of wastes to be placed in each landfill cell. This is particularly relevant when the facility will be handling incompatible wastes by segregating them into designated cells. The format used in condition III.D for container placement can be used for this purpose.]

B. DESIGN AND OPERATING REQUIREMENTS

1. The Permittee shall design, construct, and install a liner system in accordance with the requirements of 25 Pa. Code §75.264(v)(3)(xiv), as specified in the attached plans and specifications, Attachment ____.

[The attached plans and specifications must demonstrate compliance with 25 Pa. Code §75.264(v)(3)(xiv). The liner must be constructed of materials that prevent wastes from passing into it during the active life of the facility.]

2. The Permittee shall maintain a minimum distance of 4 feet between the top of the subbase and any seasonal high water table and a minimum distance of 8 feet between the top of the subbase and the groundwater table, as required by 25 Pa. Code §75.264(v)(3)(xv).

3. The Permittee shall maintain liners, caps*, and liner and cover* systems in a manner such that the outer perimeter is well protected and well marked through all stages of construction, closure, and final closure.
4. The Permittee shall design, construct, operate, and maintain a conveyance and storage system for the leachate from the leachate collection zone and run-off, as required by 25 Pa. Code §75.264(v)(3)(xviii) and as specified in the attached plans and specifications, Attachment ____.
5. The Permittee shall design, construct, operate, and maintain leachate detection zone tanks, as required by 25 Pa. Code §75.264(v)(3)(xix) and as specified in the attached plans and specifications, Attachment ____.
6. The Permittee shall manage surface water on the site, as required by 25 Pa. Code §75.264(v)(3)(vii) and as specified in the plans and specifications, Attachment ____.
7. The Permittee shall manage surface water run-off, as required by 25 Pa. Code §75.264(v)(3)(viii) and as specified in the attached plans and specifications, Attachment ____.
8. The Permittee shall control run-on, as required by 25 Pa. Code §75.264(v)(3)(ix) and as specified in the attached plans and speci-

fications, Attachment ____.

9. The Permittee shall design, construct, operate, and maintain the site in a manner which prevents or minimizes surface water percolation into hazardous waste deposits, as required by 25 Pa. Code §75.264(v)(4)(vii) and as specified in the plans and specifications, Attachment ____.

10. The Permittee shall assure that hazardous waste in landfills shall be capable of withstanding anticipated static and dynamic loadings with a minimum factor of safety of 1.5.

11. The Permittee shall operate and maintain compacting equipment to spread and compact waste in shallow layers, as required by 25 Pa. Code §75.264(v)(4)(x). Individual layers shall not exceed 2 feet.

[The permit writer may specify a greater depth than two feet. The basis for allowing a greater depth should be documented in the administrative record.]

12. The Permittee shall cover or otherwise manage the landfill to control wind dispersal of particulate matter, as required by 25 Pa. Code §75.264(v)(4)(i) and as specified in Attachment ____.

[This condition applies if the landfill will contain particulate matter

[Handwritten initials]

which may be subject to wind dispersal. The Attachment should specify the methods to be used.]

C. MUNICIPAL WASTE

The Permittee shall not [may] co-dispose hazardous waste with municipal waste. [The permit writer may allow co-disposal. The basis for allowing co-disposal should be documented in the administrative record.]

D. LIQUID WASTE

The Permittee shall not place liquid waste or waste containing free liquids into the landfill. Any hazardous waste to be disposed of in the landfill shall have greater than 20% solids content by dry weight and shall not be flowable.

E. SPECIAL REQUIREMENTS FOR CONTAINERS

The Permittee shall ensure that all empty containers are crushed flat, shredded, or similarly reduced in volume before burial in the landfill. Otherwise, a container shall be least 90 percent full before it is buried in the landfill. *X get*

F. BURNING OF SOLID WASTE

The Permittee shall not burn solid waste in the hazardous waste landfill.

G. ACCESS ROADS

The Permittee shall construct and/or maintain access roads, as required by 25 Pa. Code §75.264(v)(3)(i) and as specified in the attached plans and specifications, Attachment ____.

H. BUFFER ZONES

1. The Permittee shall establish and maintain a minimum buffer zone of 50 feet between the property line and the permitted facility within which no solid waste treatment, storage, or disposal activity shall occur.
2. The Permittee shall not construct or place a building or structure within 25 feet of the disposal area.

[If buildings or structures are necessary to conduct monitoring and testing, the permit writer should substitute the following condition for condition IX.H.2: "The Permittee may construct or place the following buildings or structures within 25 feet of the disposal area:"]

3. The Permittee shall not place waste within 3 feet of the effective edge of the liner.

I. EQUIPMENT

1. The Permittee shall maintain landfill operating equipment in operable condition and adequate in size and performance capability to assure that the facility operation will not be interrupted during normal working periods, and that the facility operation is in accordance with this permit.
2. The Permittee shall maintain standby equipment on-site or readily available for use in the event of major equipment breakdown.

[OPTIONS]

[For Facilities Which Handle Ignitable or Reactive Wastes]

___ SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES*

1. The Permittee shall not place ignitable or reactive waste in a landfill unless the procedures described in Attachment ___ are followed, as required by 25 Pa. Code §75.264(v)(4)(iii).

[The Attachment must demonstrate how the facility will handle ignitable and reactive wastes. Any such wastes must be rendered non-ignitable or non-reactive before or immediately after disposal. If the application does not address this, the permit writer should write specific conditions to implement this

provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document in the operating record compliance with the above condition as required by 25 Pa. Code §75.264(g)(3).

[For Facilities Which Handle Incompatible Wastes]

___ SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same landfill cell unless the procedures specified in Attachment ___ are followed, as required by 25 Pa. Code §75.264(v)(4)(ii).

[The Attachment must specify how the Permittee will handle incompatible wastes so as to comply with 25 Pa. Code §75.264(g)(2). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document compliance with the above condition and place this documentation in the operating record.

[For Facilities Which Handle Wastes From Off-site]

— WEIGHING OR MEASURING FACILITIES

The Permittee shall provide, operate, and maintain weighing or measuring facilities, as required by 25 Pa. Code §75.264(v)(3)(ii).

[For Facilities Which Handle Wastes From Off-site]

— HOURS OF OPERATION

The Permittee shall maintain a sign displaying the hours of operation at the entrance to the facility. The lettering shall be a minimum of 4 inches in height and of a color contrasting with its background.

[For New or Modified Facilities]

— MIGRATION OF LEACHATE INTO NEW FACILITIES

The Permittee shall design, construct, operate, and maintain the landfill in a manner that precludes any leachate from existing unlined landfill disposal areas from entering into the new, lined landfill disposal areas, as required by 25 Pa. Code §75.264(v)(4)(xvii) and the attached plans and specifications, Attachment ____.

[For New or Modified Facilities]

— CONSTRUCTION AND INSTALLATION

1. The Permittee shall use best engineering construction practices during all phases of installation and construction.
2. The Permittee shall use the quality control measures and tests specified in Attachment ___ to ensure that installation and construction conforms to the design materials and construction specifications approved in this permit.
3. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction, as required by 25 Pa. Code §75.264(v)(3)(xxii). Each certification shall be submitted to the Department in accordance with the construction schedule, condition IX. __.4.
4. The Permittee shall construct or install the landfill (cell) in accordance with the following schedule:

(Insert construction schedule,
including interim dates and reporting requirements)

[As Appropriate]

___ TREATMENT FACILITIES FOR LEACHATE AND RUN-OFF

1. The Permittee shall design, construct, operate, and maintain treatment facilities to receive the leachate and run-off from storage, as required by 25 Pa. Code §75.264(v)(3)(xxii) and as specified in the plans and specifications, Attachment ___.
2. The Permittee shall maintain a treatment facility flow rate of ___ gallons per day for each acre of active area.

[The regulations require a minimum design flow rate of 15,000 gallons per day for each acre of active area. The permit writer should establish an actual flow rate of at least 15,000 gallons per day unless the permit application demonstrates that a lesser rate is sufficient. The basis for the flow rate established in the permit must be documented in the administrative record.]

[As Appropriate]

___ DAILY AND INTERMEDIATE COVER

1. The Permittee shall provide daily and intermediate cover, as required by 25 Pa. Code §75.264(v)(3)(x) and as specified in Attachment ___.

2. The Permittee shall provide daily cover consisting of a minimum, uniform 6-inch compacted layer and an intermediate cover of a minimum, uniform 12-inch graded and compacted layer.

[As Appropriate]

— FINAL GRADES

The Permittee shall, for final surface grades of the fill area, provide a slope of not less than 2.0 percent but not exceeding 15 percent.

[The permit writer may establish greater slopes, up to 25 percent. The basis for a slope in excess of 15% must be documented in the administrative record. When the permit allows a slope of between 15 and 25 percent, it must also specify terrace requirements. Use the following condition:

"The Permittee shall construct terraces as required by 25 Pa. Code §75.264(v)(3)(vi) and as specified in the plans and specifications, Attachment ____."]

[As Appropriate]

— GAS VENTING SYSTEMS

The Permittee shall design, construct, operate, and maintain a gas venting and monitoring system, as required by 25 Pa. Code §75.264(v)(3)(xii) and as

specified in the plans and specifications, Attachment ____.

[As Appropriate]

___ VECTOR, ODOR, AND NOISE CONTROL

The Permittee shall carry out vector, odor, and/or noise control procedures, as required by 25 Pa. Code §75.264(v)(4)(vii) and the Vector, Odor, and Noise Control Plan, Attachment ____.

[As Appropriate]

___ UNLOADING AREAS

1. The Permittee shall maintain unloading areas, restricted to the proximity of the working face, to permit vehicles to unload promptly.
2. The Permittee shall provide an attendant or clearly marked, prominently located signs to direct vehicles to the unloading area.

[As Appropriate]

___ DUST CONTROL

The Permittee shall prevent dust from hampering site operations or from causing health or safety hazards or nuisances.

[As Appropriate]

___ LITTER CONTROL

The Permittee shall provide portable litter control fences, as required by 25 Pa. Code §75.264(v)(4)(xvi) and as specified in Attachment ___.

[As Appropriate]

___ APPLICATION OF LEACHATE

The Permittee shall not [may] apply leachate or run-off to the landfill. [The permit writer may allow the permittee to apply leachate or run-off to the landfill. The permit condition should refer to an attached plan or procedures for such application.]

[As Appropriate]

___ WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste within or outside the site, as required by 25 Pa. Code §75.264(v)(4)(xvii).

PART X - STORAGE AND TREATMENT SURFACE IMPOUNDMENTS

[This Part covers surface impoundments closed in accordance with 25 Pa. Code §75.264(s)(3)(xxxi). Conditions which apply to surface impoundments closed in accordance with 25 Pa. Code §75.264(s)(3)(xxx) are specified in Part XI, Disposal Surface Impoundments.]

A. WASTE IDENTIFICATION

The Permittee may store/treat the following hazardous wastes in surface impoundments, subject to the terms of this permit:

B. DURATION OF STORAGE

The Permittee shall not store hazardous waste in the surface impoundment(s) at this facility in excess of one year. [See note after condition IV.B. regarding establishment of longer storage periods.]

C. DESIGN AND OPERATING REQUIREMENTS

1. The Permittee shall design, construct, and install a liner in accordance with the requirements of 25 Pa. Code §75.264(s)(3)(xvii), as specified in the attached plans and specifications, Attachment ____.
2. The Permittee shall maintain a minimum distance of 4 feet between the subbase and any seasonal high water table and 8 feet between the subbase and groundwater, as required by 25 Pa. Code §75.264(s)(3)(xxii).
3. The Permittee shall clearly mark and protect the outer perimeter of all liner and liner systems through all stages of construction, closure, and final closure.
4. The Permittee shall design, construct, maintain, and operate the surface impoundment to prevent overtopping, as required by 25 Pa. Code §75.264(s)(3)(i), by the methods specified in Attachment ____.

[The Attachment should specify all design and operating practices that are necessary to ensure that the requirements of 25 Pa. Code §75.264(s)(3)(i) are satisfied.]

5. The Permittee shall design the impoundment so that any flow of waste into the impoundment can be immediately shut off in the event of over-

topping or liner failure.

6. The Permittee shall obtain certification from a registered professional engineer that the impoundment's dike has structural integrity as required by 25 Pa. Code §75.264(s)(3)(xxxii.)*
7. The Permittee shall, for all dikes and berms, maintain outside slopes that do not exceed 33 percent.

[The permit write may approve greater than 33 percent slopes. The basis for allowing greater slopes must be specified in the administrative record.]

8. The Permittee shall design, construct, operate and maintain leachate collection zone tanks as required by 25 Pa. Code §75.264(s)(3)(xxv) and as specified in the plans and specifications, Attachment ____.
9. The Permittee shall manage surface water on the sites as required by 25 Pa. Code §75.264(s)(3)(viii) and as specified in the plans and specifications in Attachment ____.
10. The Permittee shall control run-on, as required by 25 Pa. Code §75.264(s)(3)(ix) and as specified in the plans and specifications in Attachment ____.
11. The Permittee shall design, construct, operate, and maintain the site

in a manner which prevents or minimizes surface water percolation into the hazardous waste deposit, as required by 25 Pa. Code §75.264(s)(4)(xv) and as specified in Attachment ____.

D. EMERGENCY REPAIRS; CONTINGENCY PLAN

1. The Permittee shall inspect the impoundment in accordance with the Surface Impoundment Evaluation and Repair (SIER) Plan whenever there is any indication of a possible failure as required by 25 Pa. Code §75.264(s)(4)(vii).
2. Whenever there is evidence of failure of the impoundment, the Permittee shall remove the impoundment from service as required by 25 Pa. Code §75.264(s)(4)(viii) and immediately implement the procedures required by 25 Pa. Code §75.264(s)(4)(ix) and specified in the PPC Plan, Attachment ____.
3. Prior to restoring it to service, the Permittee shall repair any impoundment removed from service and obtain a certification from a registered professional engineer that it meets the design specifications approved in this permit, as required by 25 Pa. Code §75.264(s)(4)(xi).
4. If a surface impoundment has been removed from service due to failure,

and the impoundment is not to be restored to service, the Permittee shall close it as required by 25 Pa. Code §75.264(s)(4)(xii).

E. ACCESS ROADS

The Permittee shall construct and/or maintain access roads, as required by 25 Pa. Code §75.264(s)(3)(iii) and as specified in the attached plans and specifications, Attachment ____.

F. BUFFER ZONES

1. The Permittee shall establish and maintain a buffer zone of 50 feet between the property line and the permitted facility within which no solid waste treatment, storage, or disposal activities shall occur.
2. The Permittee shall not construct or place a building or structure within 25 feet of the surface impoundment.

[If buildings or structures are necessary to conduct monitoring and testing, the permit writer should substitute the following condition: "The Permittee may construct or place the following buildings or structures within 25 feet of the surface impoundment:".]

G. EQUIPMENT

1. The Permittee shall maintain impoundment operating equipment in operable condition and adequate in size and performance capability to assure that the facility operation will not be interrupted during normal working periods and that the facility operation is in accordance with this permit.
2. The Permittee shall maintain standby equipment on-site or readily available for use in the event of a major equipment breakdown.

[OPTIONS]

[For Facilities Which Handle Ignitable or Reactive Wastes]

___ SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The Permittee shall not place ignitable or reactive waste in a surface impoundment unless the procedures described in Attachment ___ are followed, as required by 25 Pa. Code §75.264(s)(4)(iv).

[The Attachment must demonstrate how the facility will handle ignitable and reactive wastes as required by 25 Pa. Code §75.264(s)(4)(iv). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document compliance with the above condition as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

[For Facilities Which Handle Incompatible Wastes]

___ SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same surface impoundment unless the procedures specified in Attachment ___ are followed, as required by 25 Pa. Code §75.264(s)(4)(v).

[The Attachment must specify how the Permittee will handle incompatible wastes so as to comply with 25 Pa. Code §75.264(g)(2). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document compliance as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

[For Facilities Which Treat Varying Types of Waste]

___ WASTE ANALYSIS

The Permittee shall conduct waste analyses trial treatment tests, or obtain written, documented information as required by 25 Pa. Code §75.264(s)(4)(i) and the Waste Analysis Plan, Attachment ____, before chemically treating a hazardous waste which is substantially different from waste previously treated in the impoundment or before chemically treating hazardous wastes with a substantially different process than previously used in the impoundment. The analyses, tests, and information shall be placed in the operating record.

[For Facilities Which Test Wastes]

___ TREATMENT OF WASTES

The Permittee shall conduct all treatment operations in accordance with the procedures outlined in Attachment ____.

[For Facilities Which Handle Wastes From Off-site]

___ WEIGHING OR MEASURING FACILITIES

The Permittee shall provide, maintain, and operate weighing or measuring facilities, as required by 25 Pa. Code §75.264(s)(3)(iv).

[For Facilities Which Handle Waste From Off-site]

___ HOURS OF OPERATION

The Permittee shall maintain a sign displaying the hours of operation at the entrance to the facility. The lettering shall be a minimum of 4 inches in height and of a color contrasting with its background.

[For New or Modified Facilities]

— CONSTRUCTION AND INSTALLATION

1. The Permittee shall install and construct liner systems in conformance with the manufacturer's specifications.
2. The Permittee shall inspect liner systems and cover systems for uniformity, damage, and imperfections during and after construction and installation, as required by 25 Pa. Code §75.264(s)(3)(xxi). [Earth material liner systems shall be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities and shall be tested for compaction density, moisture content, and permeability after placement.] [Manufactured liner materials shall be inspected to ensure tight seams and joints and the absence of tears or blisters.]*
3. The Permittee shall use best engineering construction practices during all phases of installation and construction.
4. The Permittee shall use the quality control measures and tests speci-

fied in Attachment ___ to ensure that installation and construction conforms to the design materials and construction specifications approved in this permit.

5. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction, as required by 25 Pa. Code §75.264(s)(xxviii). Each certification shall be submitted to the Department in accordance with the construction schedule, condition X. __.6.
6. The Permittee shall construct or install the impoundment in accordance with the following schedule:

(Insert construction schedule, including
interim dates and reporting requirements)

[As Appropriate]

___ EARTHEN DIKES

1. The Permittee shall maintain cover on all earthen dikes, as required by 25 Pa. Code §75.264(s)(3)(ii) and as specified in Attachment ___.
2. The Permittee shall operate and maintain earthen dikes to be kept free

of plant root systems and burrowing mammals as required by 25 Pa. Code §75.264(s)(4)(vi).

[As Appropriate]

DAILY AND INTERMEDIATE COVER

The Permittee shall provide a daily cover and intermediate cover, as required by 25 Pa. Code §75.264(s)(3)(x) and as specified in Attachment ____.

[As Appropriate]

DAILY COVER

The Permittee shall provide a daily cover consisting of a minimum uniform 6-inch compacted layer and a minimum 12-inch graded and compacted intermediate cover.

[As Appropriate]

GAS VENTING

The Permittee shall design, construct, operate, and maintain gas venting and gas monitoring systems, as required by 25 Pa. Code §75.264(s)(3)(xii) and as specified in the plans and specifications, Attachment ____.

[As Appropriate]

___ VECTOR, ODOR, AND NOISE CONTROL

The Permittee shall carry out vector, odor, and/or noise control procedures, as required by 25 Pa. Code §75.264(s)(4)(xiv) and the Vector, Odor and Noise Control Plan, Attachment ___.

[As Appropriate]

___ UNLOADING AREAS

1. The Permittee shall maintain unloading areas to permit vehicles to unload promptly.
2. The Permittee shall provide an attendant or clearly marked, prominently located signs to direct vehicles to the unloading areas.

[As Appropriate]

___ DUST CONTROL

The Permittee shall prevent dust from hampering site operations or from causing health or safety hazards or nuisances.

[As Appropriate]

___ WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste within or outside the site, as required by 25 Pa. Code §75.264(s)(4)(xxi).

[As Appropriate]

___ WIND DISPERSAL

The Permittee shall cover or otherwise manage the surface impoundment to control wind dispersal of the hazardous waste as required by 25 Pa. Code §75.264(s)(4)(xiii) and as specified in Attachment ___.

PART XI - DISPOSAL SURFACE IMPOUNDMENTS

[This Part covers surface impoundments closed in accordance with 25 Pa. Code §75.264(s)(3)(xxx). Conditions which apply to surface impoundments closed in accordance with 25 Pa. Code §75.264(s)(3)(xxxi) are specified in Part X, Storage Surface Impoundments.]

A. WASTE IDENTIFICATION

The Permittee may place the following hazardous wastes in surface impoundments, subject to the terms of this permit:

B. DESIGN AND OPERATING REQUIREMENTS

1. The Permittee shall design, construct, and install a liner in accordance with the requirements of 25 Pa. Code §75.264(s)(3)(xvii), as

specified in the attached plans and specifications, Attachment ____.

2. The Permittee shall maintain a minimum distance of 4 feet between the subbase and any seasonal high water table and 8 feet between the subbase and groundwater, as required by 25 Pa. Code §75.264(s)(3)(xxii).
3. The Permittee shall clearly mark and protect the outer perimeter of all liner and liner systems through all stages of construction, closure, and final closure.
4. The Permittee shall design, construct, maintain, and operate the surface impoundment to prevent overtopping, as required by 25 Pa. Code §75.264(s)(3)(i), by the methods specified in Attachment ____.

[The Attachment should specify all design and operating practices that are necessary to ensure that the requirements of 25 Pa. Code §75.264(s)(3)(i) are satisfied.]

5. The Permittee shall design the impoundment so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.
6. The Permittee shall obtain certification from a registered professional engineer that the impoundment's dike has structural integrity as required by 25 Pa. Code §75.264(s)(3)(xxxii). *

7. The Permittee shall design, construct, operate, and maintain a conveyance system and storage system for the leachate from the leachate collection zone and run-off, as required by 25 Pa. Code §75.264(s)(3)(xxiv) and as specified in Attachment ____.
8. The Permittee shall design, construct, operate, and maintain treatment facilities to receive the leachate and run-off from storage, as required by 25 Pa. Code §75.264(s)(3)(xxix) and as specified in Attachment ____.
9. The Permittee shall design, construct, operate, and maintain leachate collection zone tanks, as required by 25 Pa. Code §75.264(s)(3)(xxv).
10. The Permittee shall, for final surface grades, provide a slope of not less than 2.0 percent but not exceeding 15 percent.

[The permit writer may establish greater slopes, up to 25 percent. The basis for a slope in excess of 15 percent must be documented in the administrative record. When the permit allows a slope of between 15 and 25 percent, it must also specify terrace requirements. Use the following condition: "The Permittee shall construct terraces as required by 25 Pa. Code §75.264(s)(3)(vii) and as specified in the plans and specifications, Attachment ____."]
11. The Permittee shall assure that hazardous waste in surface impound-

ments shall be capable of withstanding anticipated static and dynamic loadings with a minimum factor of safety of 1.5.

12. The Permittee shall not construct dikes and berms with outside slopes in excess of 20 percent.

[The permit writer may approve slopes exceeding 20 percent. The basis for allowing greater slopes must be specified in the administrative record.]

13. The Permittee shall manage surface water on the site, as required by 25 Pa. Code §75.264(s)(3)(viii) and as specified in the plans and specifications in Attachment ____.

14. The Permittee shall control run-on, as required by 25 Pa. Code §75.264(s)(3)(ix) and as specified in the plans and specifications in Attachment ____.

15. The Permittee shall design, construct, operate, and maintain the site in a manner which prevents or minimizes surface water percolation into hazardous waste deposits, as required by 25 Pa. Code §75.264(s)(4)(xv) and as specified in Attachment ____.

C. EMERGENCY REPAIRS; CONTINGENCY PLAN

1. The Permittee shall inspect the impoundment in accordance with the Surface Impoundment Evaluation and Repair (SIER) Plan whenever there is any indication of a possible failure as required by 25 Pa. Code §75.264(s)(4)(vii).
2. Whenever there is evidence of failure of the impoundment, the Permittee shall remove the impoundment from service as required by 25 Pa. Code §75.264(s)(4)(viii) and immediately implement the procedures required by 25 Pa. Code §75.264(s)(4)(ix) and specified in the PPC Plan Attachment ____.
3. Prior to restoring it to service, the Permittee shall repair any impoundment removed from service and obtain a certification from a registered professional engineer that it meets the design specifications approved in this permit, as required by 25 Pa. Code §75.264(s)(4)(xi).
4. If a surface impoundment has been removed from service due to failure, and the impoundment is not to be restored to service, the Permittee shall close it as required by 25 Pa. Code §75.264(s)(4)(xii).

D. ACCESS ROADS

The Permittee shall construct and/or maintain access roads, as required by 25 Pa. Code §75.264(s)(3)(iii) and as specified in the attached plans and

specifications, Attachment ____.

E. BUFFER ZONES

1. The Permittee shall establish and maintain a buffer zone of 50 feet between the property line and the permitted facility within which no solid waste treatment, storage, or disposal activities shall occur.

2. The Permittee shall not construct or place a building or structure within 25 feet of the surface impoundment.

[If buildings or structures are necessary to conduct monitoring and testing, the permit writer should substitute the following condition: "The Permittee may construct or place the following buildings or structures within 25 feet of the surface impoundment:".]

F. EQUIPMENT

1. The Permittee shall maintain impoundment operating equipment in operable condition and adequate in size and performance capability to assure that the facility operation will not be interrupted during normal working periods and that the facility operation is in accordance with this permit.

2. The Permittee shall maintain standby equipment on-site or readily

available for use in the event of a major equipment breakdown.

[OPTIONS]

[For Facilities Which Handle Ignitable or Reactive Wastes]

___ SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The Permittee shall not place ignitable or reactive waste in a surface impoundment unless the procedures described in Attachment ___ are followed, as required by 25 Pa. Code §75.264(s)(4)(iv).

[The Attachment must demonstrate how the facility will handle ignitable and reactive wastes as required by 25 Pa. Code §75.264(s)(4)(iv). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document compliance with the above condition as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

[For Facilities Which Handle Incompatible Wastes]

___ SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same surface impoundment unless the procedures specified in Attachment ___ are followed, as required by 25 Pa. Code §75.264(s)(4)(v).

[The Attachment must specify how the Permittee will handle incompatible wastes so as to comply with 25 Pa. Code §75.264(g)(2). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document compliance with the above condition as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

[For Facilities Which Treat Varying Types of Waste]

___ WASTE ANALYSIS

The Permittee shall conduct waste analyses and trial treatment tests, or obtain written, documented information as required by 25 Pa. Code §75.264(s)(4)(i) and the Waste Analysis Plan, Attachment ___, before chemically treating a hazardous waste which is substantially different from waste previously treated in the impoundment or before chemically treating hazardous wastes with a substantially different process than previously used in the impoundment. The analyses, tests, and information shall be

placed in the operating record.

[For Facilities Which Handle Wastes From Off-site]

— WEIGHING OR MEASURING FACILITIES

The Permittee shall provide, maintain and operate weighing or measuring facilities, as required by 25 Pa. Code §75.264(s)(3)(iv).

[For Facilities Which Handle Waste From Off-site]

— HOURS OF OPERATION

The Permittee shall maintain a sign displaying the hours of operation at the entrance to the facility. The lettering shall be a minimum of 4 inches in height and of a color contrasting with its background.

[For Facilities Which Handle Waste From Off-site]

— CONSTRUCTION AND INSTALLATION

1. The Permittee shall install and construct liner systems in conformance with the manufacturer's specifications.
2. The Permittee shall inspect liner systems for uniformity, damage, and imperfections during and after construction and installation, as required by 25 Pa. Code §75.264(s)(3)(xxi). [Earth material liner sys-

tems shall be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities and shall be tested for compaction density, moisture content, and permeability after placement.] [Manufactured liner materials shall be inspected to ensure tight seams and joints and the absence of tears or blisters.]*

3. The Permittee shall use best engineering construction practices during all phases of installation and construction.
4. The Permittee shall use the quality control measures and tests specified in Attachment ___ to ensure that installation and construction conforms to the design materials and construction specifications approved in this permit.
5. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction, as required by 25 Pa. Code §75.264(s)(xxviii). Each certification shall be submitted to the Department in accordance with the construction schedule, condition X.__.6.
6. The Permittee shall construct or install the impoundment in accordance with the following schedule:

(Insert construction schedule, including
interim dates and reporting requirements)

[As Appropriate]

___ EARTHEN DIKES

1. The Permittee shall maintain a protective cover on all earthen dikes, as required by 25 Pa. Code §75.264(s)(3)(ii) and as specified in Attachment ___.
2. The Permittee shall operate and maintain earthen dikes to be kept free of plant root systems and burrowing mammals as required by 25 Pa. Code §75.264(s)(4)(vi).

[As Appropriate]

___ DAILY AND INTERMEDIATE COVER

The Permittee shall provide a daily cover and intermediate cover, as required by 25 Pa. Code §75.264(s)(3)(x) and as specified in Attachment ___.

[As Appropriate]

___ DAILY COVER

The Permittee shall provide a daily cover consisting of a minimum uniform 6-

inch compacted layer and a minimum 12-inch graded and compacted intermediate cover.

[As Appropriate]

___ GAS VENTING

The Permittee shall design, construct, operate, and maintain gas venting and gas monitoring systems, as required by 25 Pa. Code §75.264(s)(3)(xii) and as specified in the plans and specifications, Attachment ___.

[As Appropriate]

___ VECTOR, ODOR, AND NOISE CONTROL

The Permittee shall carry out vector, odor, and/or noise control procedures, as required by 25 Pa. Code §75.264(s)(4)(xiv) and the Vector, Odor and Noise Control Plan, Attachment ___.

[As Appropriate]

___ UNLOADING AREAS

1. The Permittee shall maintain unloading areas to permit vehicles to unload promptly.

2. The Permittee shall provide an attendant or clearly marked, prominently located signs to direct vehicles to the unloading areas.

[As Appropriate]

DUST CONTROL

The Permittee shall prevent dust from hampering site operations or from causing health or safety hazards or nuisances.

[As Appropriate]

WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste within or outside the site, as required by 25 Pa. Code §75.264(s)(4)(xxi).

[As Appropriate]

WIND DISPERSAL

The Permittee shall cover or otherwise manage the surface impoundment to control wind dispersal of the hazardous waste as required by 25 Pa. Code §75.264(s)(4)(xiii) and as specified in Attachment ____.

PART XII - LAND TREATMENT DEMONSTRATION*

[Before waste can be applied to a land treatment zone, the owner or operator

must demonstrate that hazardous constituents in the waste can be completely degraded, transformed, or immobilized. If the owner or operator intends to conduct field tests or laboratory analyses to make this demonstration, he or she must obtain a treatment or disposal permit under 25 Pa. Code §75.265(z). This module provides an example of such a permit. Under some circumstances, as outlined in 25 Pa. Code §75.265(z), a two-phase permit covering both the demonstration and the design construction, operation, and maintenance of the land treatment unit may be issued instead.]

A. WASTE IDENTIFICATION

The Permittee shall conduct a land treatment demonstration in accordance with the requirements of 25 Pa. Code §75.264(u)(6)-(8) for the wastes listed in Attachment _____. Any field test or laboratory analysis conducted in order to make this demonstration must be likely to show that the hazardous constituents listed in Attachment _____ will be completely degraded, transformed or immobilized in the treatment zone of the existing or proposed land treatment unit.

[25 Pa. Code §75.264(u)(6) requires the Permittee to determine, prior to the application of the waste, whether the waste constituents can be completely degraded, transformed, or immobilized within the treatment zone.]

B. DEMONSTRATION DESIGN AND OPERATING REQUIREMENTS

The Permittee shall conduct the demonstration in accordance with the requirements of 25 Pa. Code §75.264(u)(8), as specified in the attached plans and specifications, Attachment ____.

[25 Pa. Code §75.264(u)(7) requires the permit to specify any design and operating requirements (including, in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure and clean-up activities) necessary to meet the requirements of 25 Pa. Code §75.264(u)(8).]

C. TESTING AND ANALYTICAL PROCEDURES

The Permittee shall conduct the demonstration using the testing and analytical procedures and data sources specified in Attachment ____ in accordance with requirements of 25 Pa. Code §75.264(u)(8).

[25 Pa. Code §75.264(u)(7) requires the permit to specify testing and analytical requirements, including the duration of the tests and analyses. The attachment should contain information on data sources to be used to make the demonstration, as well as information on laboratory and field tests used in the demonstration.]

A. TREATMENT PROGRAM

1. The Permittee shall establish a treatment program for the wastes listed in Table XIII-1 as required by 25 Pa. Code §75.264(u)(2). The treatment program must include the design measures and operating practices specified in condition XIII.B and the unsaturated zone monitoring provisions specified in XIII.E. The treatment program must be capable of degrading, transforming, or immobilizing the hazardous constituents listed in Attachment ____.

[25 Pa. Code §75.264(u)(4) requires the permit writer to specify both the wastes that the Permittee is allowed to treat at the unit and the hazardous constituents identified in Appendix VIII of Section 75.261 that are reasonably expected to be found in, or derived from, these wastes. The list of wastes to be treated must be based on a demonstration under 25 Pa. Code §75.264(u)(6)-(8) that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone. Conditions which apply to land treatment demonstrations are specified in Part XII. Listed wastes should be indexed to the industry and hazardous waste numbers from 25 Pa. Code §75.261.]

2. The Permittee shall design, construct, operate, and maintain the treatment unit in accordance with the requirements of 25 Pa. Code §75.264(u)(9) and as specified in the attached plans and specifications, Attachment ____.

[The permit must specify the rate and method of waste application to the treatment zone, as well as measures to control soil pH, enhance microbial or chemical reactions, and control moisture content. The permit must specify the conditions for incorporating the waste into the soil as specified in 25 Pa. Code §75.264(u)(9)(v), as well as measures to prevent ponding or standing accumulations of liquids or sludges, and to prevent vector and odor problems. The permit must specify that hazardous waste will only be applied to those soils with U.S.D.A. textural classes of sandy loam, loam, sandy clay loam, silty clay loam, and silt loam and that hazardous waste shall not be applied when the ground is saturated, covered with snow, frozen or during period of rain. The attached plans and specifications must demonstrate compliance with 25 Pa. Code §75.264(u)(9).]

3. The Permittee shall construct the treatment zone as specified in Attachment ____.

[The permit must specify the vertical and horizontal dimensions of the treatment zone. The attachment must demonstrate compliance with 25 Pa. Code §75.264(u)(5).]

B. DESIGN AND OPERATING REQUIREMENTS

1. The Permittee must design, construct, operate, and maintain the treatment zone in accordance with the requirements of 25 Pa. Code

§75.264(u)(11) and as specified in Attachment ____.

[The attached plans and specifications should demonstrate that the treatment zone will be designed, constructed, operated, and maintained to minimize runoff of hazardous constituents during the active life of the land treatment unit.]

2. The Permittee must design, construct, operate, and maintain the run-on control system as required by 25 Pa. Code §75.264(u)(10) and as specified in the attached plans and specifications, Attachment ____.

[The attached plans and specifications should demonstrate that the run-on control system is capable of preventing flow onto the treatment zone during peak discharge from at least a 25-year storm.]

3. The Permittee must design, construct, operate, and maintain the runoff management system as required by 25 Pa. Code §75.264(u)(12) and (13) and as specified in the attached plans and specifications, Attachment ____.

[The attached plans and specifications should demonstrate that the runoff management system will collect and control at least the water volume re-

sulting from a 24-hour, 25-year storm. The attached plans and specifications must reflect a consideration of the volume of contaminated runoff produced at the facility, the capacity of any runoff collective device, the climatic conditions of the area, the quality of the runoff produced and the available options for managing any contaminated runoff from the facility, and the physical and chemical characteristics of the waste in the facility.]

4. The Permittee shall manage the collection and holding facilities associated with run-on and runoff control systems as required by 25 Pa. Code §75.264(u)(14), as specified in Attachment ____.

[The attachment must demonstrate how the Permittee will maintain the design capacity of the collection and holding facilities.]

5. The Permittee shall manage the unit to control wind dispersal as required by 25 Pa. Code §75.264(u)(15) and as specified in Attachment ____

[This condition only applies if the treatment zone contains particulate matter which may be subject to wind dispersal. The attachment must demonstrate how the Permittee will comply with 25 Pa. Code §75.264(u)(15).]

C. FOOD-CHAIN CROPS

The Permittee shall not grow food-chain crops on the land treatment unit.
[Except animal feed. When growing animal feed, the Permittee shall follow the operating plan in Attachment ____.

[In accordance with 25 Pa. Code §75.264(u)(17), the Permittee must specify that tobacco, and any other crops intended for direct human consumption shall not be grown on hazardous waste land treatment facilities. If the Permittee has successfully demonstrated in accordance with 25 Pa. Code §75.264(u)(18) that there is no substantial risk to human health from the growth of food-chain crops in or on the treatment zone, the permit writer

may allow the growth of such crops. In accordance with 25 Pa. Code §75.264(u)(19), the owner or operator of any hazardous waste land treatment facility who intends to grow food-chain crops shall specify that animal feed shall be the only food-chain crop produced. An operating plan shall be submitted for written Department approval which describes how the animal feed will be distributed to preclude ingestion by humans, and what measures will be taken to safeguard against possible health hazards from waste constituents entering the food-chain which may result from alternative land uses. In all cases, the Permittee must include a detailed plan for crop management through and including the post-closure care period according to specifications in 25 Pa. Code §75.264(u)(20).]

D. UNSATURATED ZONE MONITORING

1. In addition to the groundwater monitoring program established in Part ____, the Permittee shall establish an unsaturated zone monitoring program for the hazardous constituents listed in Attachment ____, as required by 25 Pa. Code §75.264(u)(21).

[Unless the Department requires monitoring for principal waste constituents (PWCs) in accordance with the provisions of 25 Pa. Code §75.264(u)(21)(i)(B), this list of hazardous constituents should be the same as the one specified in condition XIII.A.]

2. The Permittee shall install an unsaturated zone monitoring system as required by 25 Pa. Code §75.264(u)(21)(ii) and as specified in the attached plans and specifications, Attachment ____.

[The attached plans and specifications should demonstrate compliance with the requirements of 25 Pa. Code §75.264(u)(21)(ii).]

3. The Permittee shall establish a background value for each hazardous constituent to be monitored under condition XIII.D.1 as required by 25 Pa. Code §75.264(u)(21)(iii) and as specified in Attachment ____.

[The attachment should demonstrate how the Permittee will comply with the requirements of 25 Pa. Code §75.264(u)(21)(iii).]

4. The Permittee shall conduct soil monitoring and soil-pore liquid monitoring as required by 25 Pa. Code §75.264(u)(21)(iv) and as specified in Attachment ____.

[The attachment should demonstrate how the Permittee will comply with the requirements of 25 Pa. Code §75.264(u)(21)(iv). The permit should specify the frequency and timing of this monitoring in accordance with the conditions outlined in 25 Pa. Code §75.264(u)(21)(iv).]

5. The Permittee shall follow the sampling and analysis procedures specified in Attachment ____ as required by 25 Pa. Code §75.264(u)(21)(v).

[This attachment should demonstrate compliance with 25 Pa. Code §75.264(u)(21)(v).]

6. The Permittee shall determine whether there is a statistically significant change over background values for any hazardous constituent to

be monitored under condition XIII.D.1 each time the monitoring required by condition XIII.D.4 is conducted, as required by 25 Pa. Code §75.264(u)(21)(vi). This determination shall be made using the statistical procedures outlined in Attachment ____.

[This attachment should demonstrate compliance with the requirements of 25 Pa. Code §75.264(u)(21)(vi). The permit writer should specify the time period for making the determination in accordance with 25 Pa. Code §75.264(u)(21)(vi)(B).]

7. If the Permittee determines, pursuant to condition XIII.D.6, that there is a statistically significant increase of hazardous constituents below the treatment zone, he shall notify the Department of this finding and apply for a permit modification in accordance with the provisions of 25 Pa. Code §75.264(u)(21)(vii).
8. The Permittee has the option to successfully demonstrate that a source other than the regulated unit caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation as specified by 25 Pa. Code §75.264(u)(21)(viii).
9. The Permittee shall retain the Unsaturated Zone Monitoring Plan at the facility in accordance with 25 Pa. Code §75.264(u)(22).

E. RECORDKEEPING

The Permittee shall include hazardous waste application dates, rates, quantities, and the location of each hazardous waste placed in the facility in the operating record required under condition I.H.1, as required by 25 Pa. Code §75.264(u)(23).

F. EQUIPMENT

1. The Permittee shall maintain operating equipment in operable condition and adequate in size and performance capability to ensure that the facility operation will not be interrupted during normal working periods and that the facility operation is in accordance with this permit.

2. The Permittee shall maintain standby equipment on-site or readily available for use in the event of major equipment breakdown.

G. ACCESS ROADS

The Permittee shall construct and/or maintain access roads as required by 25 Pa. Code §75.264(u)(36) and the attached plans and specifications, Attachment ____.

H. FUTURE LAND OWNERSHIP AND USAGE

The Permittee shall include provisions in the land record and property deed for the possible future transfer of lands used at the hazardous waste land treatment site as required by 25 Pa. Code §75.264(u)(40) and as specified in Attachment ____.

[The attachment shall demonstrate compliance with 25 Pa. Code §75.264(u)(40), and shall include a proviso for a stipulation in the land record and property deed which states that the property received hazardous waste, and that food crops shall not be grown due to a possible health hazard, unless otherwise approved by the Department.]

[OPTIONS]

[For Facilities Which Handle Ignitable or Reactive Wastes]

___ SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The Permittee shall not place ignitable or reactive waste in a land treatment unit unless the procedures described in Attachment ____ are followed, as required by 25 Pa. Code §75.264(u)(28).

[The attachment must demonstrate how the facility will handle ignitable and

reactive wastes as required by 25 Pa. Code §75.264(u)(28). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document compliance with XIII. __.1 as required by 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

[For Facilities Which Handle Incompatible Wastes]

___ SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in or on the same treatment zone unless the procedures specified in Attachment ___ are followed, as specified in 25 Pa. Code §75.264(u)(29).

[The attachment must specify how the Permittee will handle incompatible wastes so as to comply with 25 Pa. Code §75.264(g)(2). If the application does not address this, the permit writer should write specific conditions to implement this provision or should condition the permit so as not to allow this practice.]

2. The Permittee shall document compliance with XIII. __.1 as required in 25 Pa. Code §75.264(g)(3) and place this documentation in the operating record.

[As Appropriate]

___ UNLOADING AREAS

The Permittee shall maintain unloading areas and provide for personnel or signs to safely and expediently unload the wastes to be treated.

[As Appropriate]

___ WASTE TRACKING

The Permittee shall eliminate or minimize the tracking of waste within and outside the site as required by 25 Pa. Code §75.264(u)(34).

[As Appropriate]

___ DUST CONTROL

The Permittee shall prevent dust from hampering facility operations or from causing health or safety hazards or nuisances.

[For Facilities Which Handle Wastes From Off-site]

___ WEIGHING OR MEASURING FACILITIES

The Permittee shall provide, maintain, and operate weighing or measuring facilities as required by 25 Pa. Code §75.264(u)(37).

[For Facilities Which Handle Wastes From Off-site]

___ OPERATING HOURS

The Permittee shall maintain at the entrance to the facility a sign displaying hours of operation. The lettering shall be a minimum of four inches in height and of a color contrasting with its background.

[As Appropriate]

___ VECTOR, ODOR, AND NOISE CONTROL

The Permittee shall carry out vector, odor, and/or noise control procedures as required by 25 Pa. Code §75.264(u)(39) and the Vector, Odor, and Noise Control Plan, Attachment ___.

PART XIV - DETECTION MONITORING

[Facilities that store, treat, or dispose of hazardous waste in surface impoundments, waste piles unless exempt under 25 Pa. Code §75.264(t)(3), land treatment units, or landfills must have a groundwater monitoring program. This

Part presents permit conditions addressing the regulatory requirements for detection monitoring programs [25 Pa. Code §75.264(n)(4) through (n)(20) as applicable]. The applicant is required to submit detailed plans and engineering reports describing the proposed program. The attachments referred to in the permit should be from that report and satisfy the appropriate regulations.]

A. WELL LOCATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring system as specified below:

1. The Permittee shall install and maintain groundwater monitoring wells at the locations specified on the attached map, Attachment ____.

[The attached map must provide identifiers for all monitoring wells and specify their location. The number and location of the wells must meet the requirements of 25 Pa. Code §75.264(n)(4) or (n)(5); and (n)6 if necessary.]

2. The Permittee shall construct and maintain the monitoring wells identified in condition XIV.A.1 in accordance with the attached plans and specifications, Attachment ____.

[The attached plans and specifications must meet the requirements of 25 Pa.

Code §75.264(n)(4), (n)(7), and (n)(8). They should consist of design drawings and design criteria applicable to all wells, as well as individual well specifications identifying depth, screened intervals, etc.]

B. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in condition XIV.A.

1. Samples shall be collected by the techniques described in Attachment ____.
2. Samples shall be preserved [and shipped (when shipped off-site for analysis)] in accordance with the procedures specified in Attachment ____.
3. Samples shall be analyzed according to the procedures specified in Attachment ____.
4. Samples shall be tracked and controlled using the chain of custody procedures specified in Attachment ____.

[The sampling and analytical procedures described in the above attachments must

be designed to provide a reliable indication of the quality of the groundwater below the facility as required by 25 Pa. Code §75.264(n)(9) and (n)(10).]

C. GROUNDWATER ELEVATION

1. The Permittee shall determine, for each monitoring well, the groundwater surface elevation each time groundwater is sampled in accordance with condition XIV.F., as required by 25 Pa. Code §75.264(n)(16).
2. The Permittee shall, at least annually by January 31, evaluate the data from condition XIV.C.1., as required by 25 Pa. Code §75.264(n)(21), to determine if monitoring wells are still properly located.

D. BACKGROUND QUALITY AND MONITORING PARAMETERS

1. The Permittee shall monitor well numbers ____, as described in condition XIV.A for the parameters specified in Table XIV-1.
2. For those parameters in Table XIV-1 for which no background values are established, the Permittee shall establish background values using the procedures specified in Attachment _____. The values established shall automatically become part of this permit.

[The parameters specified in XIV.D.1 should satisfy the requirements of 25 Pa. Code §75.264(n)(11). The owner and operator, as required by 25 Pa. Code §75.264(n)(12), (n)(13), and (n)(14), must establish background values for the parameters in XIV.D.1. These values are specified in the permit.

For those parameters for which background values have not been established at the time the permit is issued, the permit writer must specify the procedures by which they will be established. The attachment must specify the necessary methods. The methods specified by 25 Pa. Code §75.264(n)(12)(i) and (n)(13)(ii) (if no upgradient well is available), and (n)(14) should, at a minimum, be used in determining all background values. The background values established pursuant to condition XIV.D.2 become part of the permit.]

TABLE XIV-1 INDICATOR MONITORING PARAMETERS

Parameter	Background Concentration
pH	
Total Organic Carbon	
Total Organic Halogen	
Specific Conductance	

(The permit writer should list any additional parameters)

E. STATISTICAL PROCEDURES

When evaluating the monitoring results pursuant to condition XIV.F, the Permittee shall use the following procedures:

1. When a constituent's background value has a sample coefficient of variation less than 1.00, the Permittee shall follow the statistical procedures described in 25 Pa. Code §75.264(n)(17)(i).

[The permit writer may specify an alternate but equivalent statistical procedure. Such alternate procedures must meet the requirements of 25 Pa. Code §75.264(n)(17)(B).]

2. In all other situations the Permittee shall use the statistical procedures in Attachment ____.

[The procedures described in the attachment must satisfy the requirements of 25 Pa. Code §75.264(n)(17)(ii). The permit writer may approve alternate statistical procedures as specified in 25 Pa. Code §75.264(n)(17)(ii).]

F. MONITORING PROGRAM AND DATA EVALUATION

The Permittee shall determine groundwater quality as follows:

1. The Permittee shall collect, preserve and analyze samples pursuant to condition XIV.B.

2. The Permittee shall determine groundwater quality (i.e., the parameters specified in condition XIV.D.1) throughout the active life of the facility (including the closure care period and post-closure care period [if applicable]). These determinations shall be made [specify frequency].

[25 Pa. Code §75.264(n)(15) requires that the determinations be made at least quarterly.]

3. The Permittee shall determine the groundwater flow rate and direction at least annually, as required by 25 Pa. Code §75.264(n)(22).

4. The Permittee shall determine whether there is a statistically significant increase, for each parameter identified in condition XIV.D.1, over the background values for that parameter (see condition XIV.D.2) each time groundwater quality is determined in accordance with condition XIV.F.2 as required by 25 Pa. Code §75.264(n)(18)(i). In determining whether such an increase has occurred, the Permittee must compare the groundwater quality at each monitoring well specified in

XIV.D.1 to the background levels specified in Table XIV-1 in accordance with the procedures specified in condition XIV.E.

5. The Permittee shall perform the evaluation described in condition XIV.F.4 within 30 days after completion of sampling as required by 25 Pa. Code §75.264(n)(18)(ii).

G. REPORTING AND RECORDKEEPING AND RESPONSE

1. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to XIV.F in the operating record, as required by 25 Pa. Code §75.264(n)(23).

2. If the Permittee determines, pursuant to condition XIV.F, that there is a statistically significant increase above the background values for the parameters specified in condition XIV.D.1. he shall:
 - a. Determine whether the facility has caused the significant increase as required by 25 Pa. Code §75.264(n)(19);

[If the Permittee determines that the facility has caused the significant increases he must address condition G.2.c.]

- b. Notify the Department in writing within seven days, as required by 25 Pa. Code §75.264(n)(20)(i);
- c. Within 30 days, develop and submit a specific plan, as required by 25 Pa. Code §75.264(n)(20)(ii) and (n)(20)(iii), based on the outline required under 25 Pa. Code §75.264(n)(3) for a groundwater quality assessment program.
- d. Submit all reports, to the Department, as required by 25 Pa. Code §75.264(n)(24).

H. PERMIT MODIFICATION

If the Permittee determines that the detection monitoring program required by this permit no longer satisfies the requirements of the regulations, he must submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations, as required by 25 Pa. Code §75.264(n)(20)(viii).

I. GROUNDWATER PROTECTION STANDARD

The Permittee must assure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard under 25 Pa. Code §75.264(n)(2) are taken during the term of the permit.

[If the Permittee determines that there is a statistically significant increase for indicator parameters, constituents, or reaction products at the point of compliance that provide a reasonable indication of the presence of hazardous constituents in the groundwater, a groundwater quality assessment program must be established at the facility. This Part presents permit conditions addressing the regulatory requirements [25 Pa. Code §75.264(n)(20)] for groundwater quality assessment programs. The applicant is required to submit detailed plans and engineering reports describing the proposed program. The attachments to the permit should be from such plans and reports if and when they satisfy the appropriate regulations. The Department must approve:

1. a list of the hazardous constituents
2. the compliance point
3. the compliance period.]

A. WELL LOCATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring system to comply with the requirements 25 Pa. Code §75.264(n)(20), as specified below:

1. The Permittee shall install and maintain groundwater monitoring wells at the locations specified on the map presented in Attachment ____.

[The attached map must provide identifiers for all monitoring wells and specify their location. The number and location of the wells must meet the requirements of 25 Pa. Code §75.264(n)(20)(iii).]

2. The Permittee shall construct and maintain the monitoring wells identified in condition XV.A.1 in accordance with the plans and specifications presented in Attachment ____.

[The attached plans and specifications must meet the requirements of 25 Pa. Code §75.264(n)(7) and (n)(8). They should consist of design drawings and design criteria applicable to all wells, as well as individual well specifications identifying depth, screened intervals, etc.]

B. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in condition XV.A.

1. Samples shall be collected by the techniques described in Attachment ____.

2. Samples shall be preserved [and shipped (when shipped off-site for analysis)] in accordance with the procedures specified in Attachment ____.
3. Samples shall be analyzed according to the procedures specified in Attachment ____.
4. Samples shall be tracked and controlled using the chain of custody procedures specified in Attachment ____.

[The sampling and analysis procedures described in the above attachments must be designed to provide a reliable indication of the quality of the groundwater below the waste management area as required by 25 Pa. Code §75.264(n)(9) and (n)(10).]

C. GROUNDWATER ELEVATION

1. The Permittee shall determine, for each monitoring well, the groundwater surface elevation each time groundwater is sampled in accordance with condition XV.F., as required by 25 Pa. Code §75.264(n)(16).
2. The Permittee shall, at least annually by January 31, evaluate the data

from condition XV.C.1., as required by 25 Pa. Code §75.264(n)(21), to determine if monitoring wells are still properly located.

D. MONITORING PARAMETERS

1. The Permittee shall monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard. The hazardous constituent concentration limits which comprise this standard are listed in Table XV-1.

TABLE XV - PARAMETERS

Hazardous Constituents	Concentration Limit
------------------------	---------------------

2. The Permittee shall monitor well numbers _____ at the point of compliance, as described in condition XV.A, and as designated on the map incorporated in Attachment ____.
3. The ocompliance period is equal to [specify time period].

E. STATISTICAL PROCEDURES

When evaluating the monitoring results pursuant to condition XV.F, the Permittee shall use the following procedures:

1. When a constituent's background value has a sample coefficient of variation less than 1.00, the Permittee shall follow the statistical procedures described in 25 Pa. Code §75.264(n)(17)(i).

[The permit writer may specify an alternate but equivalent statistical procedure. Such alternate procedures must meet the requirements of 25 Pa. Code §75.264(n)(17)(i)(B).]

2. In all other situations the Permittee shall use the statistical procedures specified in Attachment ____.

[The procedures described in the attachment must satisfy the requirements of 25 Pa. Code §75.264(n)(17)(ii).]

F. MONITORING PROGRAM AND DATA EVALUATION

1. The Permittee shall determine the rate and extent of migration of the hazardous waste, hazardous constituents or decomposition byproducts in the groundwater as required by 25 Pa. Code §75.264(n)(20)(iv).

2. The Permittee shall collect, preserve and analyze samples pursuant to condition XV.B.
3. The Permittee shall determine the groundwater flow rate and direction at least annually, as required by 25 Pa. Code §75.264(n)(22).
4. The Permittee shall analyze samples from all monitoring wells at the compliance point for all constituents in Appendix VIII at least annually to determine whether additional hazardous constituents are present. If the Permittee finds additional constituents present (one not listed in condition XV.D.1), their concentrations shall be reported to the Director within seven days after completion of the analysis.
5. The Permittee shall determine whether there is a statistically significant increase, for each parameter identified in condition XV.D.1, over the concentration limit for that parameter each time the concentration of hazardous constituents is monitored in groundwater at the compliance point pursuant to condition XV.F.2. In determining whether such an increase has occurred, the Permittee must operate the groundwater quality at each monitoring well specified in condition XV.D.2 to the concentration limit for that constituent, as specified in Table XV-1 in accordance with the procedures specified in condition XV.E.

6. The Permittee shall perform the statistical evaluation required by condition XV.F.5 within 30 days after completion of sampling.

G. REPORTING AND RECORDKEEPING AND RESPONSE

1. The Permittee shall make determinations, as required by 25 Pa. Code §75.264(n)(20)(vi) within 180 days of implementation of the program.
2. The Permittee shall submit a report within 15 days of the determinations made under condition XV.G.1 containing an assessment of groundwater quality.
3. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to XV.F in the operating record, as required by 25 Pa. Code §75.264(n)(23).
4. If the Permittee determines, pursuant to condition XV.F, that there is a statistically significant increase above the concentration limits for the parameters specified in condition XV.D.1 the Permittee shall:
 - a. Submit to the Department an abatement plan as required by 25 Pa.

Code §75.264(n)(20)(vii);

- b. Submit the abatement plan within 30 days after the submission of the groundwater quality assessment report if the report determines hazardous constituents have entered the groundwater.

5. The Permittee shall submit a milestone report containing any information indicating that the significant increase in parameter(s) was due to a source other than the facility, as required by 25 Pa. Code §75.264(n)(20)(vi).

6. The Permittee shall submit all reports to the Department as required by 25 Pa. Code §75.264(n)(24).

H. PERMIT MODIFICATION

If the Permittee determines that the groundwater quality assessment required by this permit no longer satisfies the requirements of the regulations, an application for a permit modification must be submitted to make any appropriate changes to the program which will satisfy the regulations.

I. GROUNDWATER PROTECTION STANDARD

The Permittee must assure that monitoring and corrective action measures

necessary to achieve compliance with the groundwater protection standard under 25 Pa. Code §75.264(n)(2) are taken during the term of the permit.

PART XVI - ABATEMENT PROGRAM

[If hazardous waste, hazardous waste constituents, or decomposition byproducts have entered the groundwater, an abatement program must be implemented to bring the unit back into compliance. An abatement program may be permitted separately after receipt of an application for a permit modification or it may be specified as part of the permit for the groundwater quality assessment program. The Department must approve the required corrective action measures, and the monitoring program and data evaluation procedures.]

A. WELL LOCATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring system to comply with the requirements of 25 Pa. Code §75.264(n)(20)(vii), as specified below:

1. The Permittee shall install and maintain groundwater monitoring wells at the locations specified on the map presented in Attachment ____.

[The attached map must provide identifiers for all monitoring wells and speci-

fy their location.]

2. The Permittee shall construct and maintain the monitoring wells identified in condition XVI.A.1 in accordance with the plans and specifications presented in Attachment ____.

[The attached plans and specifications must meet the requirements of 25 Pa. Code §75.264(n)(7) and (n)(8). They should consist of design drawings and design criteria applicable to all wells, as well as individual well specifications identifying depth, screened intervals, etc.]

B. MONITORING PARAMETERS

1. The Permittee shall implement an abatement program to remove or treat any hazardous waste, hazardous constituents or decomposition byproducts and return to compliance. Table XVI-1 lists the hazardous constituent concentration limits.

TABLE XVI-1. MONITORING PARAMETERS

Hazardous Constituents

Concentration Limit

2. The Permittee shall monitor well numbers _____ as described in condition XVI.A. for the parameters specified in Table XVI-1.
3. The compliance period is equal to [specify frequency].

C. ABATEMENT PROGRAM

1. The Permittee shall initiate abatement within 30 days after Department approval of the abatement program.
2. The Permittee shall conduct an abatement program that results in abatement of any groundwater contamination by removing or treating any

hazardous waste or hazardous constituents or decomposition byproducts.

[The permit must specify the abatement measures to be taken. They must be initiated and completed within a reasonable period of time and may be terminated once the concentrations of hazardous constituents are reduced to levels below their respective concentration limits.]

D. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in condition XVI.A.

1. Samples shall be collected by the techniques described in Attachment ____.
2. Samples shall be preserved [and shipped (when shipped off-site for analysis)] in accordance with the procedures specified in Attachment ____.
3. Samples shall be analyzed according to the procedures specified in Attachment ____.
4. Samples shall be tracked and controlled using the chain of custody procedures specified in Attachment ____.

[The sampling and analytical procedures described in the above attachments must be designed to provide a reliable indication of the quality of the groundwater below the facility as required by 25 Pa. Code §75.264(n)(9) and (n)(10).]

E. STATISTICAL PROCEDURES

When evaluating the monitoring results pursuant to condition XVI.F the Permittee shall use the following procedures:

1. When a constituent's background value has a sample coefficient of variation less than 1.00, the Permittee shall follow the statistical procedures described in 25 Pa. Code §75.264(n)(17)(i).

[The permit writer may specify an alternate but equivalent statistical procedure. Such alternate procedures must meet the requirements of 25 Pa. Code §75.264(n)(17)(i)(B).]

2. In all other situations the Permittee shall use the statistical procedures specified in Attachment ____.

[The procedures described in the attachment must satisfy the requirements of 25 Pa. Code §75.264(n)(17)(ii). The Department may approve alternate sta-

tistical procedures as specified in 25 Pa. Code §75.264(n)(17)(ii).]

F. MONITORING PROGRAM AND DATA EVALUATION

The Permittee shall establish and implement a groundwater monitoring program to demonstrate the effectiveness of the abatement program. The Permittee shall determine groundwater quality as follows:

1. The Permittee shall collect, preserve and analyze samples pursuant to condition XVI.D.
2. The Permittee shall determine groundwater quality (i.e., the parameters specified in condition XVI.B) throughout the compliance period including any extension to the compliance period to illustrate conformance with the approved monitoring parameters for a period of three consecutive years. These determinations shall be made [specify frequency].

[25 Pa. Code §75.264(n)(15) requires that determinations be made at least quarterly.]

3. The Permittee shall determine the groundwater flow rate and direction at least annually as required by 25 Pa. Code §75.264(n)(22).

4. The Permittee shall compare the measured concentration of each monitored hazardous constituent with the approved monitoring parameters each time groundwater quality is determined in accordance with condition XVI.F.2. The Permittee must compare the groundwater quality measured at each point of compliance monitoring well with the levels specified in Table XVI-1 in accordance with the procedures specified in condition XVI.E.
5. The Permittee shall, at least annually by January 31, evaluate the data from condition XVI.F.1. as required by 25 Pa. Code §75.264(n)(21), to determine if monitoring wells are still properly located.

G. REPORTING, RECORDKEEPING, AND RESPONSE

1. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to condition XVI.F.2 in the operating record, as required by 25 Pa. Code §75.264(n)(23).
2. The Permittee must report in writing quarterly to the Director on the effectiveness of the abatement program, as required by 25 Pa. Code §75.264(n)(20)(vii).
3. The Permittee shall submit all reports to the Department as required by

25 Pa. Code §75.264(n)(24).

H. PERMIT MODIFICATION

If the Permittee determines that the abatement program established by this permit no longer satisfies the requirements of the regulations, an application for a permit modification must be submitted to make any appropriate changes to the program which will satisfy the regulations.

I. GROUNDWATER PROTECTION STANDARD

The Permittee shall assure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard under 25 Pa. Code §75.264(n)(2) are taken during the term of the permit.

6.13.85

- FACT SHEET -
FOR DRAFT PERMIT

This fact sheet has been developed for the draft Solid Waste Management Act permit which the State of Pennsylvania, Department of Environmental Resources (DER) intends to issue to _____ in _____, _____ (Permittee). This fact sheet was prepared in accordance with the requirements of 25 Pa. Code 75.270(q)(5)(iv).

A. PURPOSE OF THE PERMITTING PROCESS

The purpose of the permitting process is to afford the State of Pennsylvania (DER), interested citizens and other governmental agencies the opportunity to evaluate the ability of the Permittee to comply with the applicable hazardous waste management requirements promulgated under the Solid Waste Management Act. DER is required to prepare a draft permit which sets forth in one concise document all the applicable requirements with which the State intends to require the Permittee to comply during the ten-year duration of the permit. The public is given forty-five days to review the application and comment on the draft permit conditions prior to DER taking any final action on the application for a hazardous waste management permit.

1. The Permittee shall install and maintain groundwater monitoring wells at the locations specified on the map presented in Attachment ____.

[The attached map must provide identifiers for all monitoring wells and specify their location. The number and location of the wells must meet the requirements of 25 Pa. Code §75.264(n)(20)(iii).]

2. The Permittee shall construct and maintain the monitoring wells identified in condition XV.A.1 in accordance with the plans and specifications presented in Attachment ____.

[The attached plans and specifications must meet the requirements of 25 Pa. Code §75.264(n)(7) and (n)(8). They should consist of design drawings and design criteria applicable to all wells, as well as individual well specifications identifying depth, screened intervals, etc.]

B. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in condition XV.A.

1. Samples shall be collected by the techniques described in Attachment ____.

B. PROCEDURES FOR REACHING A FINAL DECISION

Section 75.270(q)(8) of 25 Pa. Code requires that the public be given forty-five (45) days to comment on each draft permit prepared under the Solid Waste Management Act. The comment period will begin on _____ and will end on _____.

Any person interested in commenting on the application or draft permit must do so within this forty-five (45) day comment period.

All persons wishing to comment on any of the permit conditions or the permit application should submit the comments in writing to the Department of Environmental Resources (DER), Bureau of Solid Waste Management, P.O. Box 2063, Harrisburg, Pennsylvania 17120; Attention: _____, Chief, Division of Hazardous Waste Management. Comments should include all reasonably available references, factual grounds and supporting material.

In the event DER receives written notice of opposition to the draft permit and a request for a public hearing within the comment period referenced above, a hearing shall be scheduled at a location convenient to the population center nearest to the proposed facility. Public notice of the public hearing shall be given at least 30 days before the hearing. Any requests for a public hearing accompanied by written opposition to the draft permit should be addressed to _____, Director, Hazardous Waste Management, Department of Environmental Resources, Bureau of Solid Waste Management, P.O. Box 2063, Harrisburg, Pennsylvania, 17120.

When making a determination regarding the issuance of a hazardous waste permit to _____, DER will consider all written comments received during the comment period, any oral or written statements received during the public hearing (if requested), the requirements of the hazardous waste regulations of 25 Pa. Code Chapter 75 and the DER's permitting policies.

At the time that a permit is issued, DER also will issue a response to comments. This response will specify any provisions of the draft permit which were changed in the final permit decision and the reasons for the change. DER will present the response to all significant comments on the draft permit that are raised during the public comment period or during any hearing. DER will make the response available to the public as required in 25 Pa. Code §75.270(q)(12).

C. FACILITY DESCRIPTION

[Provide information specific to the Permittee on the type of operation, the types of wastes handled and the nature of the storage, treatment or disposal operation.]

D. PERMIT ORGANIZATION

The permit is divided into _____ sections as outlined below.

<u>Section</u>	<u>Topic</u>
Part I	Standard Conditions
Part II [Note: List out only those parts which apply to the Permittee's facility.]	General Facility Conditions
Part III	Tank Storage/Treatment Conditions
Part IV	Container Storage Conditions
Part V	Incineration Conditions
Part VI	Short-Term Incineration Conditions
Part VII	Thermal Treatment Conditions

Part VIII	Waste Pile Conditions
Part IX	Landfill Conditions
Part X	Storage and Treatment Surface Impoundment Conditions
Part XI	Disposal Surface Impoundment Conditions
Part XII	Land Treatment Demonstration Conditions
Part XIII	Land Treatment Conditions
Part XIV	Detection Monitoring Conditions
Part XV	Groundwater Quality Assessment Conditions
Part XVI	Abatement Program Conditions

Parts I and II contain conditions which generally apply to all hazardous waste facilities. Part(s) _____, _____, and _____ [as appropriate], pertain specifically to the processes used at the hazardous waste facility at _____

E. SUMMARY OF THE PERMIT CONDITIONS

This section of the fact sheet consists of sixteen parts (as listed above in Section D) which provide a list of the conditions in the draft permit. Within each part, the column titled "Regulation" provides the state regulatory authority for the permit condition specified in the column titled "Permit Condition." For convenience in reviewing the permit application, the column headed "Location in Application" is provided. The permit application cited in this section is the _____ permit application, as amended on _____.

PART I
STANDARD CONDITIONS

Part I of the permit sets forth the standard procedural conditions that are applicable to all hazardous waste management facilities. All regulatory citations listed below refer to DER's hazardous waste management and permitting regulations as codified in Title 25 of The Pennsylvania Code.

<u>Permit</u>		
<u>Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>
I.A	Effect of Permit	75.270(e)(1) 75.270(g)(7)
I.B	Permit Actions	75.270(g)(6) 75.270(h) 75.270(i) 75.270(q)
I.C	Severability	§124.16(a)
I.D	Definitions	75.260
I.E	Reports, Notifications, and Submissions to the Regional Manager	
I.F	Signatory Requirement	75.265(z)(13) 75.270(g)(13)
I.G	Documents to be Maintained at Facility Site	75.264(c)(3) 75.264(f)(6) 75.264(i)(q)(i) 75.264(o)(3) 75.264(k) 75.264(e)(2)(i)

I. __	Compliance Schedule Reporting	75.270(g)(16) 75.270(p)(1)(iii)
I. __	Certification of Construction or Modification	75.270(p)(1)(iii)
I.H.13	Other Noncompliance	75.270(g)(18)
I.H.14	Other Information	75.270(g)(19)

PART II
GENERAL FACILITY CONDITIONS

Part II of the permit sets forth general conditions for this facility with which the Permittee must comply. All regulatory citations listed below refer to DER's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code). NOTE: N.C. = NOT COVERED - the application is not required to cover this topic.

Permit Condition	Subject	Regulation (25 Pa. Code)	Location in Application
II.A	Design and Operation of the Facility	75.264(h)(1)	
II.B	General Waste Analysis	75.264(c)	
II.C	Security	75.264(d)(2) and (3)	
II.D	General Inspection Requirements	75.264(e)	
II.E	Personnel Training	75.264(f)	
II.E	Preparedness and Prevention	75.264(h)	
II.F.1	Required Equipment	75.264(h)(2)	

II.I	Closure	75.264(o)
II.I.1	Performance Standard	75.264(o)(2)
II.I.2	Amendment to Closure Plan	75.264(o)(4)
II.I.3	Notification of Closure	75.264(o)(5)
II.I.4	Time Allowed for Closure	75.264(o)(6) and (7)
II.I.5	Disposal or Decontamination of Equipment	75.264(o)(8)
II.I.6	Certification of Closure	75.264(o)(9)
II.J	Cost Estimate for Facility Closure	75.319
II.J.1	Annual Adjustment	75.319(b)
II.J.2	Adjustment for Changed Conditions	75.319(c)
II.K	Bonding Requirements	75.321 75.316

<u>Permit</u>		<u>Regulation</u>	<u>Location in</u>
<u>Condition</u>	<u>Subject</u>	<u>(25 Pa. Code)</u>	<u>Application</u>
II.L	Liability Insurance	75.332 75.333	
II. __	Required Notices		
II. __.1	Notice to the Department	75.264(j)(8)	
II. __.2	Notice to Generator		
II. __	General Requirements for Ignitable, Reactive or Incompatible Waste	75.264(g)	
II. __	Manifest System	75.264(j)	
II. __	Post-Closure		
II. __.1	Monitoring and Maintenance	75.264(o)(15) and (16) 75.264(s)(3)	

		(xxx)(E) 75.264(u)(25) 75.264(v)(3) (xxvi)(F)and(G)
II. __.2	Amendment to Post-Closure Plan	75.264(o)(17) and (18)
II. __	Notice to Local Land Authority	75.264(o)(19)
II. __	Floodplain Standard	75.265(z)(22)

PART III
STORAGE IN CONTAINERS

Part III of the permit sets forth conditions for storage in containers with which the Permittee must comply. All regulatory citations listed below refer to DER's hazardous waste management regulations as codified in Title 25 of The Pennsylvania Code (25 Pa. Code).

Permit	Regulation	Location in
<u>Condition</u>	<u>Subject</u>	<u>(25 Pa. Code)</u>
		<u>Application</u>
III.A	Waste Identification	75.264(c)
III.B	Duration of Storage	75.260
III.C	Condition of Containers	75.264(q)(1)
III.D	Placement Requirements	75.264(g)(1) and (q)(9)
III.E	Compatibility of Wastes With Containers	75.264(q)(2)
III.F	Management of Containers	75.264(q)(3) and (4)
III.G	Containment	75.264(q)(10) through (12)

III.H	Container Stacking Height, Width, and Depth	75.264(q)(14)
III. __	Special Requirements for Ignitable or Reactive Wastes	75.264(q)(14)(11) and (q)(15)
III. __	Special Requirements for Incompatible Wastes	75.264(q)(7)-(9)
III. __.1	Placement of Incompatible Wastes	75.264(q)(7)

<u>Permit</u>		<u>Regulation</u>	<u>Location in</u>
<u>Condition</u>	<u>Subject</u>	<u>(25 Pa. Code)</u>	<u>Application</u>
III. __.2	Incompatible Wastes in Unwashed Containers	75.264(q)(8)	
III. __.3	Storage of Incompatible Wastes	75.264(q)(9)	
III. __.4	Documentation	75.264(g)(3)	
III. __	Weighing or Measuring Facilities	75.264(q)(6)	
III. __	Operating Hours	75.264(q)(6)	

PART IV
TANK STORAGE/TREATMENT CONDITIONS

Part IV of the permit sets forth conditions for storage/treatment in tanks with which the Permittee must comply. All regulatory citations listed below refer to DER's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit</u>		<u>Regulation</u>	<u>Location in</u>
<u>Condition</u>	<u>Subject</u>	<u>(25 Pa. Code)</u>	<u>Application</u>
IV.A	Waste Identification	75.264(c)	
IV.B	Duration of Storage	75.260	

IV.C	Design and Construction of Tanks	75.264(r)(15)
IV.D	Protection from Overfilling	75.264(r)(4), (5), and (16)
IV.E	Secondary Containment	75.264(r)(6)
IV.F	Emergency Repairs; Contingency Plan	75.264(r)(20), (21),(22), (24), and (25)
IV.G	Access Roads	75.264(r)(26)
IV.H	Buffer Zone	75.264(r)(27)
IV.I	Equipment	
IV. __.1	Equipment Maintenance	25.264(r)(35)
IV. __.2	Standby Equipment	75.264.(r)(36)
IV. __	Treatment of Wastes in Tanks	
IV. __	Protection from Corrosion	75.264(r)(3)
IV. __	Special Requirements for Ignitable or Reactive Wastes	

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
IV. __.1	Special Requirements	75.264(r)(10)	
IV. __.2	Documentation	75.264(g)(3)	
IV. __.3	NFPA Requirements	75.264(r)(11)	
IV. __	Special Requirements for Incompatible Waste		
IV. __.1	Incompatible Waste Precautions	75.264(r)(12) and (13)	
IV. __.2	Documentation	75.264(g)(3)	
IV. __	Waste Analysis	75.264(r)(7)	
IV. __	Weighing or Measuring Facilities	75.264(r)(17)	
IV. __	Operating Hours	75.264(r)(18)	

IV. __	Tank Construction or Installation	
IV. __.1	Inspections	75.264(r)(19)
IV. __.2	Construction Practices	75.264(r)(31)
IV. __.3	Quality Control Measures	75.264(r)(32)
IV. __.4	Professional Engineer Certification	75.264(r)(33)
IV. __.5	Construction Schedule	75.264(r)(33)
IV. __	Surface Water Management	
IV. __.1	Design Standards	75.264(r)(28)
IV. __.2	Run-off	75.264(r)(29)
IV. __.3	Run-on	75.264(r)(30)
IV. __	Vector, Odor, and Noise Control	75.264(r)(34)
IV. __	Unloading Areas	75.264(r)(37)
IV. __	Dust Control	75.264(r)38)
IV. __	Waste Tracking	75.264(r)(39)

PART V

INCINERATION CONDITIONS

Part V of the permit sets forth conditions for incineration with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
V.A	Construction [For new facilities]	75.264(h)(1)	

V.A.1	Construction Practices	75.264(w)(14)
V.A.2	Quality Control Measures	75.264(w)(15)
V.A.3	Professional Engineer Certification	75.264(w)(16)
V.A.4	Construction Schedule	75.264(w)(16)
V.A.5	Maintenance [For existing facilities]	75.264(h)(1)
V.B	Performance Standard	75.264(w)(6)
V.C	Limitation on Wastes	75.264(w)(5)
V.D	Operating Conditions	75.264(w)(7)
V.E	Waste Feed Cut-off	75.264(w)(7) (iv)
V.F	Facility Monitoring	75.264(w)(9)
V.G	Waste Analysis Monitoring	75.264(w)(4)
V.H	Other Departmental Permits & Approvals	75.264(w)(11)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
V.I	Access Roads	75.264(w)(22)	
V.J	Buffer Zone	75.264(w)(13)	
V.K.	Equipment Maintenance	75.264(w)(18)	
V.L.	Standby Equipment	75.264(w)(19)	
V. _	Incineration Facility Modifications [if applicable]		
V. _ .1	Construction Practices	75.264(w)(14)	
V. _ .2	Quality Control Measures	75.264(w)(15)	
V. _ .3	Professional Engineer Certification	75.264(w)(16)	
V. _ .4	Construction Schedule	75.264(w)(16)	
V. _	Odor and Noise Control [if applicable]	75.264(w)(17)	
V. _	Unloading Areas [if applicable]	75.264(w)(20)	

V. __	Waste Tracking [if applicable]	75.264(w)(21)
V. __	Weighing and Measuring Facilities [if applicable]	75.264(w)(23)
V. __	Operating Hours [if applicable]	75.264(w)(24)

PART VI

SHORT-TERM INCINERATOR CONDITIONS

Part VI of the permit sets forth conditions for short-term incineration with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
VI.A	Shakedown Phase		
VI.A.1	Duration of the Shakedown Period	75.264(w)(25) (i)	
VI.A.2	Waste Feed Identification	75.264(w)(5)	
VI.A.3	Operating Conditions	75.264(w)(7)	
VI.A.4	Waste Feed Cut-off	75.264(w)(7) (iv)	
VI.A.5	Facility Monitoring	75.264(w)(9)	
VI.B	Trial Burn Phase		
VI.B.1	Trial Burn Plan	75.264(w)(27)	
VI.B.2	Trial Burn POHC(s)	75.264(w)(8) (i)	
VI.B.3	Trial Burn Determinations	75.264(w)(29)	

VI.B.4 Trial Burn Submissions 75.264(w)(29)
(iii)and (iv)

VI.C Post-Trial Burn Phase

VI.C.1 Waste Feed Identification 75.264(w)(8)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
VI.C.2	Operating Conditions	75.264(w)(7)	
VI.C.3	Waste Feed Cut-off	75.264(w)(7) (iv)	
VI.C.4	Facility Monitoring	75.264(w)(9)	
VI.D	General Provisions		
VI.D.1	Waste Analysis Monitoring	75.264(w)(4)	
VI.D.2	Other Departmental Permits & Approvals	75.264(w)(11)	
VI.D.3	Access Roads	75.264(w)(22)	
VI.D.4	Buffer Zone	75.264(w)(13)	
VI.D.5	Equipment Maintenance	75.264(w)(18)	
VI.D.6	Standby Equipment	75.264(w)(19)	
VI.D. _	Incineration Facility Modifications [if applicable]		
VI.D. __.1	Construction Practices	75.264(w)(14)	
VI.D. __.2	Quality Control Measures	75.264(w)(15)	
VI.D. __.3	Professional Engineer Certification	75.264(w)(16)	
VI.D. __.4	Construction Schedule	75.264(w)(16)	
VI.D. _	Odor and Noise Control [if applicable]	75.264(w)(17)	
VI.D. _	Unloading Areas [if applicable]	75.264(w)(20)	
VI.D. _	Waste Tracking [if applicable]	75.264(w)(21)	
VI.D. _	Weighing and Measuring Facilities [if applicable]	75.264(w)(23)	

VI.D. Operating Hours [if applicable] 75.264(w)(24)

PART VII

THERMAL TREATMENT CONDITIONS

Part VII of the permit sets forth conditions for thermal treatment with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
VII.A	Construction [For new facilities]	75.264(h)(1)	
VII.A	Maintenance [For existing facilities]	75.264(h)(1)	
VII.B	Limitation on Wastes	75.264(c)	
VII.C	Analysis of New Wastes	75.264(x)(3)	
VII.D	Operating Conditions [For Continuous Process Operations]	75.264(x)(7)	
VII.E	Operating Conditions [For Open Burning of Waste Explosives]	75.265(x)(6) and (7)	
VII.F	Monitoring	75.264(x)(4)	

PART VIII

WASTE PILE CONDITIONS

Part VIII of the permit sets forth conditions for waste piles with which the Permittee must comply. All regulatory citations listed below refer to the

Department's hazardous waste management regulations, as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
VIII.A	Waste Identification	75.264(c)	
VIII.B	Duration of Storage	75.260	
VIII.C	Design and Operating Requirements		
VIII.C.1	Underlying Liner	75.264(t)(4)(ii)	
VIII.C.2	Effective Life of Liner	75.264(t)(5)	
VIII.C.3	Protection from Plant Growth	75.264(t)(6)	
VIII.C.4	Liner Subbase	75.264(t)(4)(v)	
VIII.C.5	Distance to Seasonal High Groundwater Table	75.264(t)(7)	
VIII.C.6	Leachate Collection and Removal System	75.264(t)(4)(i)	
VIII.C.7	Run-off Control	75.264(t)(8)	
VIII.C.8	Conveyance and Storage System for Leachate	75.264(t)(9)	
VIII.C.9	Run-on Control	75.264(t)(13)	
VIII.C.10	Collection and Holding Facilities for Run-off and Run-on	75.264(t)(14)	
<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
VIII.C.11	Surface Water Management	75.264(t)(31)	
VIII.C.12	Surface Water Percolation Control	75.264(t)(32)	
VIII.C.13	Minimum Distance from Pile to Liner	75.264(t)(35)	

VIII.C.14	Wind Dispersal	75.264(t)(19)
VIII.D	Exemption from Groundwater Protection Requirements	75.264(t)(3)(ii) or (iii)

[Use the following if 75.264(t)(3)(ii) is applicable.]

VIII.D.1	Double Liner, Leak Detection and Leachate Collection Systems	75.264(t)(3)(ii)
VIII.D.2	Response to Leaks	75.264(t)(3)(ii)

[Use the following if 75.264(t)(3)(iii) is applicable.]

VIII.D.3	Response to Leaks	75.264(t)(3)(iii)
VIII.D.1	Liner System	75.264(t)(3)(iii)
VIII.D.2	Waste Removal and Inspection	75.264(t)(3)(iii)
VIII.D.3	Leachate Collection Systems	75.264(t)(4)(i)
VIII.D.4	Response to Leaks	75.264(n)(4)
VIII.D.5	Detection Monitoring Schedule	75.264(n)(4)

[Use the following if 75.264(t)(3)(i) is applicable.]

VIII.D.1	Design and Construction Under Protective Structure	75.264(t)(3)(i)
VIII.D.2	Prohibition of Free Liquids and Wastes that Generate Leachate	75.264(t)(3)(i)
VIII.E	Emergency Repairs; Contingency Plan	

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
VIII.E.1	Waste Pile Evaluation and Repair Plan	75.264(t)(22)	
VIII.E.2	Response to Leaks	75.264(t)(23) and (24)	
VIII.E.3	Professional Engineer Certifications	75.264(t)(25)	
VIII.E.4	Closure of Piles Having Un-	75.264(t)(26)	

	repaired Leaks	
VIII.F	Access Roads	75.264(t)(29)
VIII.G	Buffer Zone	75.264(t)(30)
VIII.H	Equipment	
VIII.H.1	Operating Equipment	75.264(t)(40)
VIII.H.2	Standby Equipment	75.264(t)(41)
VIII. __	Special Requirements for Ignitable or Reactive Waste	
VIII. __.1	Procedures for Placing Ignitable or Reactive Wastes to the Pile	75.264(t)(36)
VIII. __.2	Preventing Ignition	75.264(t)(3)
VIII. __	Special Requirements for In-compatible Wastes	75.264(g)(2) & 75.264(t)(37) and (38)
VIII. __	Double Liner Systems	75.264(t)(4)(iii) and (iv)
VIII. __	Treatment Facilities Receiving Leachate and Run-off for Storage	75.264(t)(10) through (12)
VIII. __	Special Requirements for Wind Dispersal Control Mechanisms	75.264(t)(20)
VIII. __	Weighing and Measuring Facilities	75.264(t)(27)
VIII. __	Hours of Operation	75.264(t)(28)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
VIII. __	Construction and Installation	75.264(t)(15) through (18)	
VIII. __	Vector, Odor, and Noise Control	75.264(t)(39)	
VIII. __	Unloading Areas	75.264(t)(41)	
VIII. __	Dust Control	75.264(t)(43)	
VIII. __	Waste Tracking	75.264(t)(44)	

Note: Proposed regulations have substantially reordered and added to current regulations. Many revisions to the Fact Sheet and Permit Conditions will be necessary should proposed regulations not be approved.

PART IX
LANDFILL CONDITIONS

Part IX of the permit set forth conditions for landfills with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
IX.A	Waste Identification	75.264(c)	
IX.B	Design and Operating Requirements		
IX.B.1	Liner System	75.264(v)(3)(xiv)	
IX.B.2	Distance to Seasonal High Ground-water Table	75.264(v)(3)(xv)	
IX.B.3	Outer Perimeter of Liner	75.264(v)(3)(xvi)	
IX.B.4	Conveyance and Storage System for Conveying and Storing Leachate from Leachate and Runoff System	75.264(v)(3)(xviii)	

IX.B.5	Leachate Detection Zone Tanks	75.264(v)(3)(xix)
IX.B.6	Surface Water Management	75.264(v)(3)(vii)
IX.B.7	Run-off	75.264(v)(3)(viii)
IX.B.8	Run-on	75.264(v)(3)(ix)
IX.B.9	Surface Water Percolation	75.264(v)(4)(viii)
IX.B.10	Static and Dynamic Loadings	75.264(v)(3)(xiii)
IX.B.11	Compaction of Waste	75.264(v)(4)(x)
IX.B.12	Wind Dispersal	75.264(v)(4)(i)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
IX.C	Municipal Waste	75.264(v)(4)(iv)	
IX.D	Liquid Waste	75.264(v)(4)(v)	
IX.E	Special Requirements for Containers	75.264(v)(4)(vi)	
IX.F	Burning of Solid Waste	75.264(v)(4)(xiv)	
IX.G	Access Roads	75.264(v)(4)(i)	
IX.H	Buffer Zones	75.264(v)(3)(iv)	
IX.I	Equipment	75.264(v)(4)(ix)	
IX. _	Special Requirements for Ignitable or Reactive Wastes	75.264(v)(4)(iii)	
IX. _	Special Requirements for Incompatible Waste	75.264(v)(4)(ii)	
IX. _	Weighing or Measuring Facilities	75.264(v)(3)(ii)	
IX. _	Hours of Operation	75.264(v)(3)(iii)	
IX. _	Migration of Leachate into New Facilities	75.264(v)(4)(xvii)	
IX. _	Construction and Installation	75.264(v)(3)(xx) through (xxi)	
IX. _	Treatment Facilities for Leachate	75.264(v)(3)(xxiii)	

	and Run-off	through (xxv)
IX. __	Daily and Intermediate Cover	75.264(v)(3)(x)
IX. __	Final Grades	75.264(v)(3)(v) or (vi)
IX. __	Gas Venting Systems	75.264(v)(3)(xii)
IX. __	Vector, Odor, and Noise Control	75.264(v)(4)(viii)
IX. __	Unloading Areas	75.264(v)(4)(xii)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
IX. __	Dust Control	75.264(v)(4)(xv)	
IX. __	Litter Control	75.264(v)(4)(xvi)	
IX. __	Application of Leachate	75.264(v)(4)(xviii)	
IX. __	Waste Tracking	75.264(v)(4)(xvii)	

PART X

STORAGE AND TREATMENT SURFACE IMPOUNDMENT CONDITIONS

Part X of the permit sets forth conditions for storage and treatment surface impoundments with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
X.A	Waste Identification	75.264(c)	
X.B	Duration of Storage		
X.C	Design and Operating Requirements		

X.C.1	Liner Requirements	75.264(s)(3)(xvii)
X.C.2	Distance to Seasonal High Ground-water Table	75.264(s)(3)(xxii)
X.C.3	Outer Perimeter of Liner	75.264(s)(3)(xxiii)
X.C.4	Freeboard Requirement	75.264(s)(3)(i)
X.C.5	Waste Feed Shutoff	75.264(s)(3)(xiv)
X.C.6	Structural Integrity of Dikes	75.264(s)(3)(xxxii)
X.C.7	Outside Slopes	75.264(s)(3)(xviii)
X.C.8	Leachate Detection Zone Tanks	75.264(s)(3)(xxv)
X.C.9	Surface-Water Measurement	75.264(s)(3)(viii)
X.C.10	Run-on	75.264(s)(3)(ix)
X.C.11	Surface-Water Percolation	75.264(s)(4)(xv)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
X.D.	Emergency Repairs; Contingency Plan		
X.D.1	Surface Impoundment Evaluation and Repair Plan	75.264(s)(4)(vii)	
X.D.2	Removal from Service	75.264(s)(4)(viii)	
X.D.3	Restoration to Service	75.264(s)(4)(xi)	
X.D.4	Closure of Surface Impoundment Removed from Service	75.264(s)(4)(xii)	
X.E	Access Roads	75.264(s)(3)(iii)	
X.F	Buffer Zones	75.264(s)(3)(vi)	
X.G	Equipment	75.264(s)(4)(xvi) and (xvii)	
X. _	Special Requirements for Ignitable or Reactive Waste	75.264(s)(4)(iv)	
X. _	Special Requirements for Incom-	75.264(s)(4)(v)	

	patible Waste	
X. __	Waste Analysis	75.264(s)(4)(1)
X. __	Treatment of Wastes	
X. __	Weighing or Measuring Facilities	75.264(s)(3)(iv)
X. __	Hours of Operation	75.264(s)(3)(v)
X. __.1	Manufacturer's Specifications	75.264(s)(3)(xx)
X. __.2	Liner System Inspection	75.264(s)(3)(xxi)
X. __.3	Best Engineering Practices	75.264(s)(3)(xxvi)
X. __.4	Quality Control Measures	75.264(s)(3)(xxvii)
X. __.5	Certification	75.264(s)(3)(xxviii)
X. __.6	Constructin Schedule	

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
X. __	Earthen Dikes	75.264(s)(3)(ii) and 75.264(s)(4)(vi)	
X. __	Daily and Intermediate Cover	75.264(s)(3)(x)	
X. __	Daily Cover	75.264(s)(3)(xi)	
X. __	Gas Venting	75.264(s)(3)(xii)	
X. __	Vector, Odor, and Noise Control	75.264(s)(4)(xiv)	
X. __	Unloading Areas	75.264(s)(4)(xviii)	
X. __	Dust Control	75.264(s)(4)(xx)	
X. __	Waste Tracking	75.264(s)(4)(xxi)	
X. __	Wind Dispersal	75.264(s)(4)(xiii)	

PART XI

DISPOSAL SURFACE IMPOUNDMENT CONDITIONS

Part XI of the permit sets forth conditions for disposal surface impoundments with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XI.A	Waste Identification	75.264(c)	
XI.B	Design and Operating Requirements		
XI.B.1	Liner Requirements	75.264(s)(3)(xvii)	
XI.B.2	Distance to Seasonal High Ground-water Table	75.264(s)(3)(xxi)	
XI.B.3	Outer Perimeter of Liner	75.264(s)(3)(xxiii)	
XI.B.4	Freeboard Requirement	75.264(s)(3)(i)	
XI.B.5	Waste Feed Shutoff	75.264(s)(3)(xiv)	
XI.B.6	Structural Integrity of Dikes	75.264(s)(3)(xxxii)	
XI.B.7	Conveyance System and Storage System for Conveying and Storing Leachate from Leachate Collection Zone and Run-off	75.264(s)(3)(xxiv)	
XI.B.8	Leachate Treatment Facilities	75.264(s)(3)(xxix)	
XI.B.9	Leachate Collection Zone Tanks	75.264(s)(3)(xxv)	
XI.B.10	Final Grades	75.264(s)(3)(vii)	
XI.B.11	Static and Dynamic Loadings	75.264(s)(3)(xiii)	
<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XI.B.12	Outside Slopes	75.264(s)(3)(xix)	

XI.B.13	Surface-Water Management	75.264(s)(3)(viii)	
XI.B.14	Run-on	75.264(s)(3)(ix)	
XI.B.15	Surface-Water Percolation	75.264(s)(4)(xv)	
XI.C	Emergency Repairs; Contingency Plan		
XI.C.1	Surface Impoundment Evaluation and Repair Plan	75.264(s)(4)(vii)	
XI.C.2	Removal from Service and Remedial Action	75.264(s)(4)(viii) and (ix)	
XI.C.3	Restoration to Service	75.264(s)(4)(xi)	
XI.C.4	Closure of Surface Impoundment Removed from Service	75.264(s)(4)(xii)	
XI.D	Access Roads	75.264(s)(3)(iii)	
XI.E	Buffer Zones	75.264(s)(3)(vi)	
XI.F	Equipment	75.264(s)(4)(xvi) and (xvii)	
XI. __	Special Requirements for Ignitable or Reactive Waste	75.264(s)(4)(iv)	
XI. __	Special Requirements for Incompatible Waste	75.264(s)(4)(v)	
XI. __	Waste Analysis	75.264(s)(4)(i)	
XI. __	Weighing and Measuring Facilities	75.264(s)(3)(iv)	
XI. __	Hours of Operation	75.264(s)(3)(v)	
XI. __	Construction and Installation		
XI. __.1	Manufacturer's Specifications	75.264(s)(3)(xx)	
<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XI. __.2	Cover System Inspection	75.264(s)(3)(xxi)	
XI. __.3	Best Engineering Practices	75.264(s)(3)(xxvi)	
XI. __.4	Quality Control Measures	75.264(s)(3)(xxvii)	

XI. __.5	Professional Engineer's Certification	75.264(s)(3)(xxviii)
XI. __.6	Construction Schedule	
XI. __	Earthen Dikes	75.264(s)(3)(ii) and (4)(vi)
XI. __	Daily and Intermediate Cover	75.264(s)(3)(x)
XI. __	Daily Cover	75.264(s)(3)(xi)
XI. __	Gas Venting	75.264(s)(3)(xii)
XI. __	Vector, Odor, and Noise Control	75.264(s)(4)(xiv)
XI. __	Unloading Areas	75.264(s)(4)(xv)
XI. __	Dust Control	75.264(s)(4)(xx)
XI. __	Waste Tracking	75.264(s)(4)(xxi)
XI. __	Wind Dispersal	75.264(s)(4)(xiii)

PART XII

LAND TREATMENT DEMONSTRATION

Part XII of the permit sets forth the conditions and procedures that are applicable to land treatment demonstration with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XII.A	Waste Identification	75.264(u)(6) through (8)	

XII.B Demonstration, Design and Operating Requirements 75.264(u)(7) and (8)

XII.C Testing and Analytical Procedures 75.264(u)(7) and (8)

PART XIII

LAND TREATMENT

Part XIII of the permit sets forth the conditions and procedures that are applicable to land treatment with which the Permittee must comply. All regulatory citations listed below refer to the Department's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XIII.A	Treatment Program		
XIII.A.1	Program Description	75.264(u)(2) and (4)	
XIII.A.2	Design, Construction and Operation	75.264(u)(9)	
XIII.A.3	Treatment Zone Description	75.264(u)(5)	
XIII.B	Design and Operating Requirements		
XIII.B.1	Treatment Zone Design, Construction and Operation	75.264(u)(11)	
XIII.B.2	Run-on Control	75.264(u)(10)	
XIII.B.3	Run-off Management System	75.264(u)(12) and (13)	
XIII.B.4	Collection and Holding Facility Management	75.264(u)(14)	

XIII.B.5 Wind Dispersal Control 75.264(u)(15)
 XIII.C Food Chain Crops 75.264(u)(17)
 through (20)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XIII.D	Unsaturated Zone Monitoring (UZM)		
XIII.D.1	Monitoring Program Description	75.264(u)(21)	
XIII.D.2	Installation of UZM System	75.264(u)(21)(ii)	
XIII.D.3	Background Values	75.264(u)(21)(iii)	
XIII.D.4	Soil and Soil-Pore Liquid Monitoring	75.264(u)(21)(iv)	
XIII.D.5	Sampling and Analysis Procedures	75.264(u)(21)(v)	
XIII.D.6	Statistical Significance Determination	75.264(u)(21)(vi)	
XIII.D.7	Duty to Notify	75.264(u)(21)(vii)	
XIII.D.8	Option to Demonstrate Alternate Sources	75.264(u)(21)(viii)	
XIII.D.9	Retention of UZM Plan	75.264(u)(22)	
XIII.E	Recordkeeping	75.264(u)(23)	
XIII.F	Equipment	75.264(u)(30) and (31)	
XIII.G	Access Roads	75.264(u)(36)	
XIII.H	Future Land Ownership and Usage	75.264(u)(40)	
XIII. _	Special Requirements for Ignitable or Reactive Waste		
XIII. _ .1	Procedure Description	75.264(u)(28)	
XIII. _ .2	Compliance Documentation	75.264(g)(3)	
XIII. _	Special Requirements for Incompatible Wastes		

XIII. __.1	Procedure Description	75.264(u)(29) and 75.264(g)(2)	
<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XIII. __.2	Compliance Documentation	75.264(g)(3)	
XIII. __	Unloading Areas	75.264(u)(32) and (33)	
XIII. __	Waste Tracking	75.264(u)(34)	
XIII. __	Dust Control	75.264(u)(35)	
XIII. __	Weighing or Measuring Facilities	75.264(u)(36) and (37)	
XIII. __	Operating Hours	75.264(u)(23)	
XIII.K	Vector, Odor, and Noise Control	75.264(u)(39)	

PART XIV

DETECTION MONITORING CONDITIONS

Part XIV of the permit sets forth conditions for basic detection ground-water monitoring requirements with which the Permittee must comply. All regulatory citations listed below refer to Pennsylvania's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XIV.A	Well Location and Construction	75.264(n)(4) through (8)	
XIV.B	Sampling and Analysis Procedures	75.264(n)(9) and (10)	

XIV.C	Groundwater Elevation	75.264(n)(16) and (21)
XIV.D	Background Quality and Monitoring Parameters	75.264(n)(11) through (14)
XIV.E	Statistical Procedures	75.264(n)(17)
XIV.F	Monitoring Program and Data Evaluation	75.264(n)(15)(18) and (22)
XIV.G	Reporting and Recordkeeping and Response	75.264(n)(19),(20), (23) and (24)
XIV.H	Permit Modification	75.264(n)(20)
XIV.I	Groundwater Protection Standard	75.264(n)(2)

PART XV

GROUNDWATER QUALITY ASSESSMENT CONDITIONS

Part XV of the permit sets forth conditions for groundwater assessment requirements with which the Permittee must comply. All regulatory citations listed below refer to Pennsylvania's hazardous waste management regulations as codified in Title 25 of the Pennsylvania Code (25 Pa. Code).

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (25 Pa. Code)</u>	<u>Location in Application</u>
XV.A	Well Location and Construction	75.264(n)(7)(8) and (20)	
XV.B	Sampling and Analysis Procedures	75.264(n)(9)(10)	
XV.C	Groundwater Elevation	75.264(n)(16)(21)	
XV.D	Monitoring Parameters	75.264(n)(20)	
XV.E	Statistical Procedures	75.264(n)(17)	

PENNSYLVANIA HAZARDOUS WASTE PERMIT STRATEGY

This document represents Phase One of the multi-year hazardous waste permit strategy for the Commonwealth of Pennsylvania. Prior to this fiscal year, the permit goals for the hazardous waste program were developed on a year-to-year basis, with little focus on a long term program. This strategy reflects Pennsylvania's attempt to align its program with the National Permits Strategy for FY85, and to develop long range permit goals over the next several years.

I. Receiving Permit Applications

A. Calling-In Permit Applications

In an effort to determine the number of actual hazardous waste facilities, all Pennsylvania Part Bs were called in over a 7-month period beginning in October 1982. This caused a great number of facilities to alter their management of hazardous wastes when faced with the prospect of preparing a costly permit application. By June 1983, over 600 Part Bs were called in. As of December 1984, the state had received 176 permit applications, consisting of the following: 33 land disposal, 10 incinerator, and 133 storage/treatment facilities (Attachment I).

B. New Applications

Consistent with EPA's priorities scheme, Pennsylvania assigns high priority to proposed off-site permit applications. In several instances, a new facility will be proposed to replace an older facility which does not meet DER's design requirements, providing a significant environmental benefit. When a developer approaches DER with a proposal, the state attempts to work closely with the applicant to expedite the permit process.

Because these new applications will replace existing applications in terms of priorities, it may be necessary for DER to renegotiate its grant commitments with EPA from time to time.

C. Emergency Permits

At this time, EPA issues RCRA emergency permits with DER providing concurrence and on-site inspections as required. It is not anticipated that these permits will significantly impact the Pennsylvania permit program.

II. Resources

A. Organization

The Pennsylvania hazardous waste program is managed by the Bureau of Solid Waste Management. The organizational structure to implement this program consists of six regional offices and a central office in Harrisburg. Each regional office is headed by a Solid Waste Manager and assisted by a technical staff under the supervision of a Facilities Chief and an Operations Chief. The Facilities Chief is responsible for the review and issuance of permits; the Operations Chief

handles matters relating to inspection and compliance. All permit issuance is carried out on the regional level with the Central Office providing permit coordination and direction, technical assistance, and in the near future, permit oversight activities. Attachment II illustrates the proposed organizational structure of the Bureau, which is currently awaiting final approval.

B. Funding

Percent of grant funding allocated to permitting: 51.5% after accounting for program management.

RCRA work years in the state for FY85: 71.3

Number of work years for permit activities: 33.0 (3.0% permit oversight)

Total permitting work years: 30.0

Resource distribution across activities is consistent with the RCRA Implementation Plan.

C. State Resources Available for Processing Permit Applications

Attachment III illustrates the breakdown of the FY85 facility staff, both regional and Central Office, and the estimated time that each position is committed to hazardous waste permit activities. Staff time is also spent on related permitting activities, including closure activities, permit-by-rule determinations, transporter licensing and variance reviews.

D. Skill Mix of Permitting Staff

All Pennsylvania permitting staff have technical backgrounds with at least one position in each region and the Central Office from each of the following disciplines: engineering, hydrogeology, soil science, and environmental chemistry. The state believes that this skill mix is complementary for permitting purposes. The permitting staff does not become involved with compliance, except as it relates specifically to permit issuance (e.g., ground water monitoring or application deficiencies).

When preparing the FY85 permit commitments, it was determined that Pennsylvania's ability to process land disposal closures and permits would be limited by the availability of the hydrogeologists' time, which amounts to 10 work years state-wide.

E. Alternatives to Program Resources

1. Contractor Support

Depending on the availability of RCRA supplemental funding, Pennsylvania has requested such money be applied towards the processing of land disposal applications in the Pittsburgh and Meadville Regions and incinerator permits in the Norristown Region.

2. Workload Sharing With EPA

The state depends on EPA to offer guidance on specific permit issues on an as-needed basis. In addition, the state intends to communicate as frequently

as is necessary to see that the dual permitting process runs smoothly. This will be done informally between the individual DER and EPA permit writers, and via a biweekly conference call between Central Office and the EPA permit staff.

3. Allocation of Time by Specialists Within DER

The Pennsylvania hazardous waste program, in some instances, interfaces with other environmental protection programs such as Air Quality and Water Quality. An agreement was reached with the Bureau of Water Quality regarding the processing of permits requiring concurrent approval. A similar arrangement with Air Quality will be developed in the coming months to facilitate the processing of incinerator permits. It was felt that working cooperatively with the other bureaus would bring more expertise to the hazardous waste permit program than creating new positions within the Bureau.

4. Other Provisions

DER recently requested an IPA position to coordinate a Central-Office permit quality assurance team. This team will review draft permits from the regions for quality and consistency before they are sent to EPA.

III. Permit Processing Strategy

A. Managing the Permit Workload

1. Planned Time Frames and Workyear Requirements for Processing Steps

In preparing its FY85 grant commitments, Pennsylvania used the workload estimates presented in the Interim National Criteria for a Quality Hazardous Waste Management Program Under RCRA. In the past however, the state has found that both the workload and time frame estimates are too optimistic and do not reflect the true resources required to process a hazardous waste permit. These time frames must be expanded to compensate for the increased requirements of the RCRA reauthorization and community participation.

2. Actions When Slippage Occurs from Planned Schedules

The state utilizes a monthly milestone chart to monitor progress on the regional permitting activities. Each region is aware of its permit commitments, and if an unavoidable delay is encountered, the region must alert the Central Office and EPA, in writing, of the delay and offer either a substitute action or an adjusted time frame. The proposed Central Office permit oversight team (headed by the IPA position) will, in addition to ensuring permit quality and consistency, be responsible for assisting the regions in handling administrative permit snags. The Central Office has always had a technical staff available to assist in technical guidance and policy regarding hazardous waste permits.

B. Improving Processing Time

Significant delays in the FY84 permit program were attributed to three items: the time lapse between the request for information from an applicant (NOD) and receipt of sufficient information, preparation of the EPA Draft Permit and Fact Sheet, and difficulties in obtaining a timely and adequate financial instrument from the applicant. The following steps outline Pennsylvania's commitment to minimize these delays in the coming year.

1. Improving Application Quality

It is the state's experience that the most effective method of obtaining an adequate NOD response is to work with the applicant. If there are several issues that need to be addressed, the applicant is encouraged to meet with the technical staff to resolve issues. Enforcement action is taken or the permit denied when appropriate in accordance with the Interim National Criteria for a Quality Hazardous Waste Program Under RCRA.

2. The DER Model Permit

DER and EPA have experienced problems in implementing the joint permitting program. To alleviate some of these problems, in November, a DER Model Permit and Fact Sheet were developed, and the state permit writers received training in their preparation. Because of the similarity between the EPA and DER documents and the fact that the regions have been preparing the EPA documents for the past several months, this is not expected to pose a problem in FY85.

3. Financial Assurance and Bonding

DER's financial requirements, proposed in December, will not become effective until June, 1985. To expedite the permit applicants' compliance with these new regulations, DER will be advising the applicants of their need to secure financial instruments before or on the effective date.

IV. Coordinating Permitting Activities With Enforcement

A. Inspecting Facilities After Call-In

All interim status facilities are inspected by the operations staff on a regular basis. Early in the application process, the facilities staff (permit writers) conducts a site visit with the inspector. Depending on the complexity of the project, a permit writer may make several site visits during the permit process. If an EPA permit writer is working concurrently on the application, this person will be included in at least one site visit. The state considers the site visit to be a vital step in the application review process.

B. Obtaining Sufficient Groundwater Data

Approximately 70% of the state's facilities have the necessary background data for either a permit issuance or denial. The remaining 30% would be brought into a compliance schedule under a Consent Order and Agreement. A permit action

would be worked into the Order, contingent on the applicants adherence to the compliance schedule.

C. Incomplete Part Bs

The state prefers to use permit denial in lieu of enforcement for applicants refusing to adequately address its application deficiencies. The process which the state plans to implement is described by the following steps:

1. A Notice of Deficiency is sent to the applicant.
2. If the requisite information is not received, DER may issue a Notice of Violation.
3. If no response is received from the NOV, DER sends a letter informing the applicant of its intent to deny the permit and terminate interim status.
4. A public notice is issued.
5. DER denies the permit and terminates the interim status of the facility.

When possible, the public notice and permit denial will be done jointly with EPA.

D. Late Part Bs

The state will use enforcement action against facilities that do not submit a Part B or closure plan. This will consist of a Notice of Violation followed by termination of interim status.

V. Public Participation

The following three major steps have been taken to strengthen Pennsylvania's public participation program as it relates to hazardous wastes. It should be noted that the implementation of any community participation plan must be expected to have a corresponding effect on the permit process, both in terms of time and resources, the impact of which will be commensurate with the complexity of the plan.

- A. In December, Pennsylvania submitted its proposed regulations to the Environmental Quality Board, which were designed to be consistent with the RCRA 40 CFR 124 standards concerning public notification.
- B. In accordance with the Pennsylvania Special Conditions - FY85 RCRA Grant - EPA and the state are to develop a format for preparing a draft public involvement plans for environmentally significant facilities. The state has commented on a draft version prepared by EPA.
- C. With federal funding, the state commissioned a study by the firm of Rogers, Golden and Halpern entitled "Public Participation Program for the Hazardous Waste Management in Pennsylvania". This document, completed in draft in September, specifically outlines a Model Permitting Process as it relates to public participation. When finalized, this process will encompass all of the Pennsylvania requirements for public participation.

VI. RCRA Reauthorization Amendments

The RCRA amendments will result in significant changes to the current DER-EPA joint permitting process. The following items will be analyzed for their impact on the process and a schedule for implementation developed when EPA provides the state with the appropriate guidelines. Wherever necessary, DER will be able to request additional information from applicants under subsection 75.280(c) of its proposed regulations to expedite the transition to the new requirement.

A. Double Liner Requirements

The state will be evaluating EPA's new requirements for disposal facilities to determine if they are more stringent than the existing DER double liner requirements.

B. Continuing Releases

The new requirement to address corrective action for continuing releases may require DER to reevaluate many of the applicants that are already substantially into the review process. This provision alone may prove to have the greatest influence on the scheduling of permit actions.

C. Bulk Liquid Disposal

DER currently prohibits the disposal of liquids in landfills, so that the new EPA requirement is not expected to pose any problems to the existing permit process.

D. Exposure and Health Assessments

It is difficult to predict how the public exposure and health assessment requirement will affect Pennsylvania permits. Because of the August 8 deadline, DER and EPA will need to work quickly on determining what is expected in these documents, and relaying this information to the applicants.

E. Acceleration of Permits

The accelerated permit schedules for land disposal and incineration facilities should not greatly affect the state permit program since (1) all existing hazardous waste applications have been received and (2) these types of applications have received priority status. Dependent on the previously discussed provisions of the Act, these applications will be scheduled for final determination before FY 1989 (FY 1988 for incinerators).

F. Innovative Processes

Pending EPA guidance on R&D and developmental permits for innovative treatment/disposal methods, DER wishes to investigate the feasibility of issuing short-term permits to promote these activities.

Attachments

ATTACHMENT 1

PENNSYLVANIA PART B APPLICATIONS

	LAND DISPOSAL	REGION
1	ALCOA FASTENERS	H
2	NATIONAL STANDARD	H
3	RAYMARK	H
4	ENVIROSAFE	H
5	BETHLEHEM STEEL - STEELTON	H
6	GENERAL ELECTRIC - ERIE	M
7	NATIONAL FORGE - IRVINE	M
8	SECHAN LIMESTONE	M
9	STACKPOLE CORPORATION	M
10	CARPENTER TECHNOLOGY	N
11	ARCO PETROLEUM	N
12	GENERAL BATTERY - ALSACE TWP.	N
13	CROMPTON AND KNOWLES	N
14	BRUSH WELLMAN	N
15	*MUNICIPAL AND INDUSTRIAL DISP.	P
16	MILL SERVICE - BULGER	P
17	MILL SERVICE - YUKON	P
18	JONES AND LAUGHLIN - ALIQUIPPA	P
19	BETHLEHEM STEEL - JOHNSTOWN	P
20	MOLYCORP	P
21	KOPPERS COMPANY	W
22	TONOLLI CORPORATION	WB
23	KEYSTONE CHEMICAL	WB
24	NEW JERSEY ZINC	WB
25	TOBYHANNA ARMY DEPOT	WB

INCINERATION

1	LETTERKENNY ARMY DEPOT	H
2	GULF OIL COMPANY	N
3	MERCK SHARPE & DOHME	N
4	PENNWALT	N
5	TRANE THERMAL	N
6	SMITHKLINE CHEMICALS	N
7	WESTINGHOUSE	P
8	MERCK AND COMPANY	W
9	ZAPATA INDUSTRIES	WB

STORAGE/TREATMENT

1	DUPONT - BERG ELECTRONICS	H
2	BMY	H
3	INDUSTRIAL WASTES REMOVAL	H
4	McKESSON - HUMMELSTOWN	H
5	AMP - LANDISVILLE	H
6	SAFETY KLEEN - NEW KINGSTON	H
7	HARLEY DAVIDSON	H
8	UNION MOLYCORP	H

9	NEW CUMBERLAND ARMY DEPOT	H
10	NAVY SHIP PARTS	H
11	ARMSTRONG	H
12	HOWMET	H
13	ENVIRITE	H
14	BERKLEY PRODUCTS	H
15	INDUSTRIAL SOLVENTS & CHEMICALS	H
16	CATERPILLAR	H
17	McKESSON - DUNCANVILLE	H
18	AMP - HARRISBURG	H
19	AMP - ELIZABETHTOWN	H
20	CAPITAL LUBRICANTS	H
21	MINE SAFETY APPLIANCES	M
22	ROESSING BRONZE	M
23	SAFETY KLEEN - ERIE	M
24	GENERAL ELECTRIC - GROVE CITY	M
25	QUAKER STATE - EMLENTON	M
26	PENNZOIL	M
27	FBC CHEMICAL CORPORATION	M
28	QUAKER STATE - MCKEAN	M
29	INMETCO	M
30	EAST COAST CHEMICAL	N
31	ACE SERVICE	N
32	ROHM & HAAS - SPRINGHOUSE	N
33	*ROHM & HAAS - BRISTOL	N
34	UNITANK	N
35	KEYSTONE PORTLAND CEMENT	N
36	CHEMCLEAR	N
37	AMCHEM	N
38	*BETZ LABS - TREVOSE	N
39	STAUFFER CHEMICAL	N
40	HI PURE	N
41	THOMPSON CSF	N
42	ALLIED FIBERS & PLASTICS	N
43	WASTE CONVERSION	N
44	DELAWARE CONTAINER	N
45	RESOURCE TECH - PLYMOUTH TWP	N
46	RESOURCE TECH - CONSHOHOCKEN	N
47	SARTOMER	N
48	SUPERIOR TUBE	N
49	CHEMCLENE	N
50	CONVERSION SYSTEMS - MARCUS HOOK	N
51	ALLIED CHEMICAL	N
52	BETZ LABS - LANGHORNE	N
53	GENERAL ELECTRIC - VALLEY FORGE	N
54	JOHNSON MATTHEY	N
55	BOEING VERTOL	N
56	ROHM & HAAS - DELAWARE VALLEY	N
57	SUN PETROLEUM	N
58	C & D BATTERIES	N
59	GENERAL BATTERY	N
60	BP OIL	N
61	SAFETY KLEEN - KUHSVILLE	N
62	SAFETY KLEEN - WEST CHESTER	N
63	ROSS BICYCLES	N
64	OLIN CORPORATION	N
65	PRESTOLITE	N
66	CRC CHEMICALS	N
67	AIR PRODUCTS	N
68	SAFETY KLEEN - MALVERN	N

69	SAFETY KLEEN - TULLYTOWN	N
70	PFIZER	N
71	BETHLEHEM APPARATUS	N
72	US NAVAL BASE	N
73	BISHOP TUBE	N
74	McKESSON CHEMICAL	N
75	EAST PENN MANUFACTURING	N
76	KEYSTONE LAMP	N
77	NAVAL AIR DEVELOPMENT	N
78	PPG - RESEARCH & DEVELOPMENT	P
79	PPG - SPRINGDALE	P
80	McKESSON	P
81	CALGON - NEVILLE	P
82	GENERAL ELECTRIC - COLLIER	P
83	DUPONT - DUNBAR	P
84	FISHER SCIENTIFIC	P
85	KOPPERS - MONROEVILLE	P
86	UNION SWITCH AND SIGNAL	P
87	SHENANGO	P
88	SAFETY KLEEN - JEFFERSON	P
89	AMO POLLUTION SERVICES	P
90	ROBERTSHAW CONTROLS	P
91	ENVIROTRON	P
92	ASHLAND OIL	P
93	HYDROCARBON REFINING INC	P
94	*RUETGERS NEASE	W
95	*CORNING GLASS - STATE COLLEGE	W
96	ROCKWELL #1	W
97	PURE CARBON	W
98	DUPONT - TOWANDA	W
99	MILTON MANUFACTURING	W
100	NORTH AMERICAN CAR	W
101	RENEER FILMS	WB
102	ALLIED FIBERS & PLASTICS	WB
103	AIR PRODUCTS	WB
104	FITCHBURG	WB
105	PROCTOR AND GAMBLE	WB
106	SAFETY KLEEN	WB
107	ATLAS POWDER	WB

WITHDRAWALS

1	HAMILTON TECHNOLOGY	H
2	AMP - CARLISLE	H
3	AMP - WILLIAMSTOWN	H
4	AMP - GLEN ROCK	H
5	HERITAGE METALS	H
6	C & D BATTERIES	H
7	LANCHESTER	H
8	CORNING GLASS WORKS	M
9	WITCO CHEMICAL - BUTLER	M
10	PURE CARBON	M
11	UNIFORM TUBES	N
12	BOYERTOWN SANITARY DISPOSAL	N
13	ALCO INDUSTRIES	N
14	SOLID STATE SCIENTIFIC	N
15	CABOT BERYLCO - BOYERTOWN	N
16	HONEYWELL	N
17	CONVERSION SYSTEMS - HERRMAN	N

18	CONVERSION SYSTEMS - PLY MTG	N
19	SUN TECH	N
20	CABOT BERYLCO - REVERE	N
21	ITT CORPORATION - EASTON	N
22	WHITEHALL CEMENT	N
23	CABOT BERYLCO - MUHLENBERG	N
24	BETHLEHEM STEEL	N
25	BROWN BOVERI	P
26	EDGEWATER STEEL	P
27	GULF OIL - HARMARVILLE	P
28	KELLY RUN SANITATION	P
29	ECOLOGY CHEMICAL & REFINING	P
30	KOPPERS - BRIDGEVILLE	P

	TOTAL	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
		Commitment	Actual	Commitment	Actual	Commitment	Actual	Commitment	Actual
COMPLIANCE MONITORING INSPECTIONS									
MAJOR HANDLERS ¹									
•Generators	59 (4)	14 (1)		15 (1)		15 (1)		15 (1)	
•Transporters	2 (0)	1 ()		0 ()		1 ()		0 ()	
•TSDF's ²									
- Groundwater Monitoring (existing)									
•CEI	39	0		23				17	
•CHE	19	0		8				11	
- Groundwater Monitoring (post-closure)									
•CEI	9	0		4				5	
•CHE	5	0		2				3	
- Incinerators	10	2		3		3		2	
- Permitted in FY'84	(1)	()		()		()		()	
- Storage and Treatment Facilities Permitted in FY'84	1	0		1		0		0	
- Call-Ins FY'85	(0)	()		()		()		()	
- Storage & Treatment Facilities Called-In in FY'85	0								
- Facilities Closing in FY'85	6	2		1		1		2	
- Other Major TSDF's	43	10		11		11		11	
Subtotal Major TSDF's	132 (3)			67 (2)		31 (2)		66 (1)	
Total Major Inspections	193 (7)	29 (2)							
NON-MAJOR HANDLERS ³									
•Generators	138	34		35		35		34	
•Transporters	8	2		2		2		2	
•TSDF's ⁴									
- Permitted in FY'84	0								
- FY'85 Call-Ins	0								
- Facilities Closing in FY'85	6	0		1		2		3	
- Other Non-Major TSDF's	54	13		13		14		14	
Subtotal Non Major TSDF's	[60]								
Total Non-Major Inspections	206 (2)	49 (0)		51 (1)		53 (0)		53 (1)	

	TOTAL	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
		Commitment	Actual	Commitment	Actual	Commitment	Actual	Commitment	Actual
<u>COMPLIANCE MONITORING INSPECTIONS</u>	8	4		2		2		0	1
<u>FACILITIES CLOSED IN FY'84</u> 5 (After Completion of Approved Closure Activities)									
<u>RECORD REVIEWS</u> 6									
<u>MAJOR TSDF'S</u>									
o CI/P-CI Plans	80 (3)	10 (0)		20 (1)		25 (2)		25 (0)	
o Financial Instr. & Doc.	()	()		()		()		()	
<u>NON-MAJOR TSDF'S</u> 6									
o CI/P-CI Plans	80	10		20		25		25	
o Financial Instr. & Doc.									

) Put # of Federal Handlers in parenthesis.

] Place total number of inspections in this category in the brackets. Because the numbers in brackets include all types of TSDF's, they must not be included in total for major inspections as they are counted in other areas.

100% of major handlers must be inspected in FY'85.

Guidelines for groundwater monitoring facility inspections require that 67% of the facilities receive CEI's and 33% of the facilities receive CHE's with sampling.

7% of non-major generators and transporters and 25% of non-major TSDF's must be inspected in FY'85.

The selection of non-major TSDF's to be inspected must reflect these priorities:

- o 100% of all facilities permitted in FY'84
- o 100% of FY'85 Call-Ins
- o 100% of facilities closing in FY'85

100% of the TSDF's closed in FY'84 which did not receive a follow-up inspection.

100% of major TSDF's and 33% of non-major TSDF's which were not reviewed in FY'84 must be reviewed.

COMPREHENSIVE GROUND-WATER MONITORING
EVALUATIONS TO BE PERFORMED IN FY 85

Second Quarter (December, January, February)

Existing

Kenametal	PAD004397683
RCA Corporation	PAD003026903
Abex Corporation	PAD004318416
Crompton and Knowles Corp.	PAD002917466
National Rolling Mills Inc.	PAD002324978
Kelly Run Sanitation Inc.	PAD004810222
David Kahn Inc.	PAD041520242
Koppers Company, Inc.	PAD056723285

Post-Closure

Fruehauf Corp.	PAD004338646
Penneco Division, Pennzal Products	PAD065626822

Fourth Quarter (July, August, September)

Existing

ALCOA Fasteners Division	PAD003026663
National Standard	PAD003023371
Sechan Limestone Industries, Inc.	PAD002860377
International Metals Reclamation Company	PAD087561015
Cabot Berylco Inc.	PAD044540136
GROWS Inc. Landfill	PAD000429589
Molycorp Inc.	PAD030068282
Mill Service Inc. (Yukon Site)	PAD004835146
Lyncott Corp.	PAD060506805
GTE Products Corp.	PAD003050846
Bethlehem Steel (Williamsport)	PAD003053758

Post-Closure

Drackett Inc.	PAD003038544
Pennex Aluminum Company	PAD003015716
SPS Technologies Incorporated	PAD000000554

FY1985 MILESTONE CHART

TASK/ ACTIVITY		1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL DOLLARS	COMBINED TOTAL
PROG DEV	F\$	\$ 24000	\$ 24000	\$ 24000	\$ 24000	\$ 96000	
	S\$	9120	9120	9120	9120	<u>36480</u>	
							<u>\$ 132480</u>
PERM	F\$	\$ 305979	\$305979	\$305979	\$305979	\$1223916	
	S\$	91571	91571	91571	91571	<u>366284</u>	
							<u>\$1590200</u>
COMP MONIT/ ENF	F\$	\$ 136171	\$136171	\$136171	\$136171	\$ 544684	
	F\$	87593	87594	87593	87593	<u>350373</u>	
							<u>\$ 895057</u>
PROG ADMIN	F\$	\$ 138000	\$138000	\$138000	\$138000	\$ 552000	
	S\$	13099	13099	13099	13099	<u>52396</u>	
							<u>\$ 604396</u>
TOTAL	F\$	\$ 604150	\$604150	\$604150	\$604150	\$2416600	
	S\$	201383	201384	201383	201383	<u>805533</u>	
							<u>\$3222133</u>

US EPA ARCHIVE DOCUMENT

FUNDING OF PROGRAM ELEMENTS

	<u>WORK-YEARS</u>	<u>FED\$</u>	<u>STATES</u>	<u>TOTAL\$</u>	<u>% OF TOTAL</u>	<u>% MINUS PROG DEV</u>
PERM	33	\$ 1223916	\$ 366284	\$1590200	49.4	51.5
COMP/MONIT INF	25	544684	350373	895057	27.8	29.0
PROG DEV	4	96000	36480	132480	4.0	
PROG ADMIN	<u>9.3</u>	<u>552000</u>	<u>52396</u>	<u>604396</u>	<u>18.8</u>	<u>19.5</u>
TOTAL	<u>71.3</u>	<u>\$ 2416600</u>	<u>\$ 805533</u>	<u>\$3222133</u>	<u>100.0</u>	<u>100.0</u>

PENNSYLVANIA
FY85 PERMITTING RESOURCES

	CO	N	WB	H	W	P	M	TOTAL	WORKYE
v Chief/Reg Mgr @ 10%	1	1	1	1	1	1	1	7	
HW Permit time	0.10	0.10	0.10	0.10	0.10	0.10	0.10		0.70
ilities Chief @ 35%	2	1	1	1	1	1	1	8	
HW Permit time	0.70	0.35	0.35	0.35	0.35	0.35	0.35		2.80
gineer @ 75%	1	2	1	1	1	2	1	9	
HW Permit time	0.75	1.50	0.75	0.75	0.75	1.50	0.75		6.75
emist @ 60%	2	1	1	1	1	1	1	8	
HW Permit time	1.20	0.60	0.60	0.60	0.60	0.60	0.60		4.80
drogeologist @ 50%	1	2	1	2	1	2	1	10	
HW Permit time	0.50	1.00	0.50	1.00	0.50	1.00	0.50		5.00
ils Scientist @ 60%	1	2	1	1	1	2	1	9	
HW Permit time	0.60	1.20	0.60	0.60	0.60	1.20	0.60		5.40
c. Spec/HW Coord. @ 65%	0	1	0	1	1	1	1	5	
HW Permit time	0.00	0.60	0.00	0.60	0.60	0.60	0.60		3.00
<hr/>									
TAL	10	11	7	9	8	11	8	64	
AILABLE WY	5.05	5.95	3.50	4.60	4.10	5.95	4.10		33
D CENTRAL OFFICE		0.75	0.75	0.75	0.75	0.75	0.75		
TAL WY		6.7	4.25	5.35	4.85	6.7	4.85		33